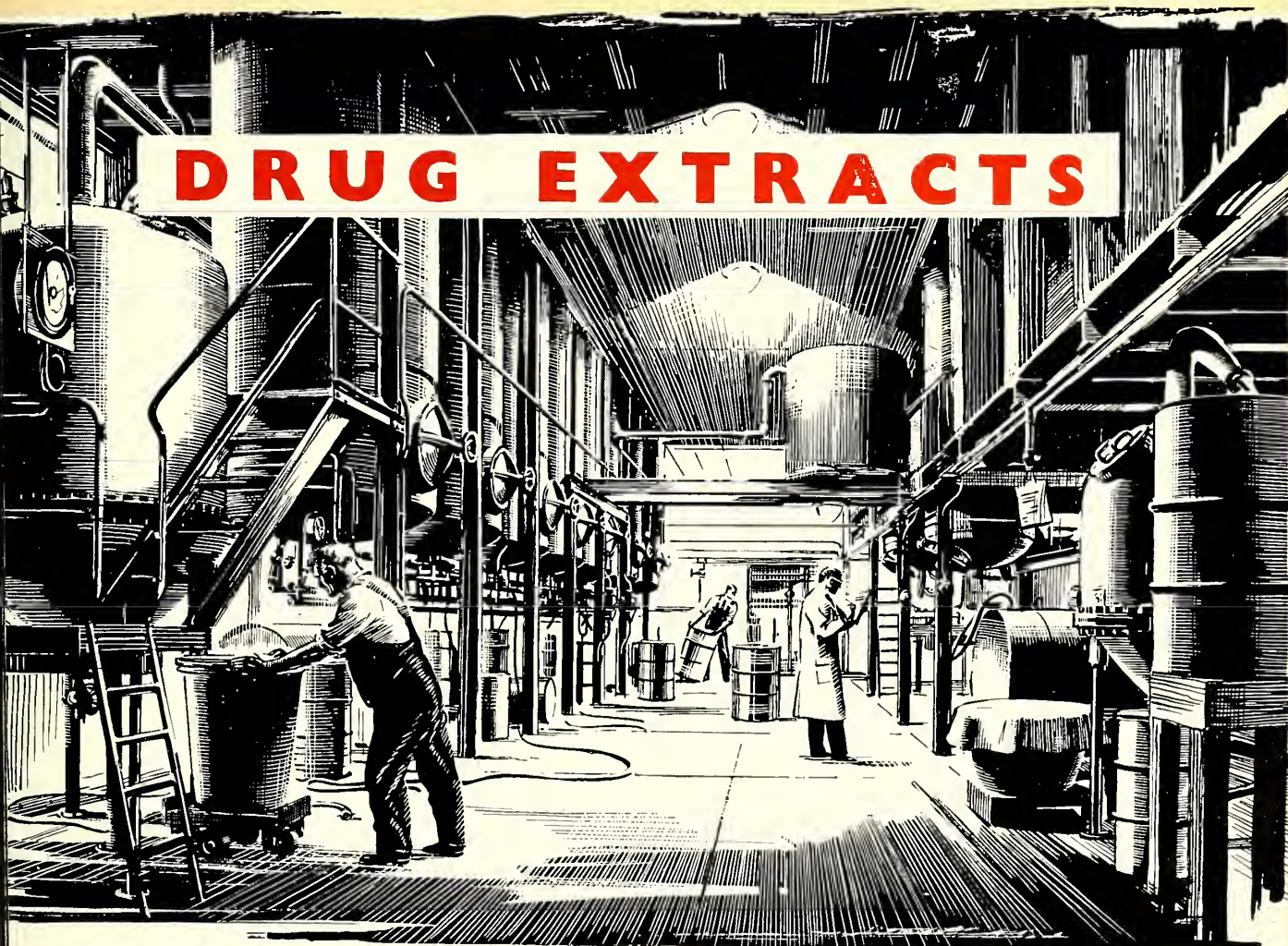


The CHEMIST AND DRUGGIST

For Retailer, Wholesaler and Manufacturer

JULY 16 1960



DRUG EXTRACTS

Stafford Allen & Sons offer the longest experience in the preparation of fine medicinal extracts. Our high vacuum concentration process ensures full therapeutic activity. We manufacture liquid, granulated, powdered and standardized extracts: also concentrated extracts for the preparation of tinctures, infusions, liquid extracts, ointments, confections, etc., etc.

May we quote you for your requirements?

STAFFORD ALLEN & SONS LIMITED
100, OLD ROAD, LONDON, N.E. 1

Telephone: CLEVERLY 1000



**HERE'S
QUALITY
FOR YOU**



Available from stock

DISPENSING BOTTLES

1-oz. to 20-oz.

RIBBED OVALS

$\frac{1}{2}$ -oz. to 16-oz.

PLAIN OVALS

4-oz., 8-oz. and 16-oz.

BOW-FRONT PANELS

1-oz. to 8-oz. and 16-oz.

OLIVE OIL BOTTLES

$2\frac{1}{2}$ -oz., 5-oz. and 10-oz.

RECTANGULAR

TABLET BOTTLES

Nos. 1, 2, 3, 4, 5, 6 and 9 sizes.

OVAL TABLET BOTTLES

Nos. 1 to $7\frac{1}{2}$ sizes.

ROUND SCREW JARS

Tall and semi-squat

PANEL FLATS

1-oz. to 4-oz.

VIALS

$\frac{1}{2}$ -oz. to 3-oz.

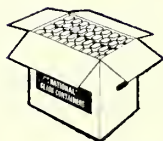
AMBER BOTTLES

We can now offer certain types of Glass Containers in Amber and your enquiries are invited.

WHOLESALE ONLY

NATIONAL
GLASS WORKS (YORK) LTD
FISHERGATE, YORK. Tel. YORK 23021
London Office.
CAROLINE HOUSE, 55-57 HIGH HOLBORN.
LONDON, W.C.1. Tel. HOLBORN 2146

SEE HOW GOOD THINGS ARE IN **GLASS**



'NATIONAL' Glass Containers are packed in closed-top sealed dust free cartons which are easily handled.



Regd Trade Mark

The CHEMIST AND DRUGGIST

JULY 16, 1960

No. 4196

Chemist's "Fine" Reduced EXECUTIVE COUNCIL TO PROTEST

THE Smethwick Executive Council of the National Health Service decided on July 6 to protest to the Minister of Health because he had reduced a proposed £25 "fine" on a pharmacist contractor to £5.

Mr. G. H. Piddock (chairman Pharmaceutical Services Committee) stated the pharmaceutical members of the Committee considered there had been a gross breach of the terms of service. It was reported that of eight test prescriptions dispensed by the chemist since the inauguration of the Health Service four were inaccurate. During 1958 a larger sum than that now proposed by the Minister had been withheld from the chemist's dispensing fees. Mr. Piddock said "The figure we had in mind was entirely fair having regard to the man's rather indifferent previous record."

courses of education and training covering the theoretical and practical work normally carried out in the first year of apprenticeship. The circular points out that the extended courses in secondary schools will be of particular value in the long run because of the contribution they can make to the quality of trained technical manpower by providing a broad basis for further study and training through an extended education, including English, and the basic mathematics and science which skilled occupations increasingly require.

Narcotic Requirements

SUPPLEMENTARY ESTIMATES FOR 1960

THE Estimated World Requirements of Narcotic Drugs in 1960, First Supplement (United Nations Publication 59.XI.4/add. 1, 2s. 6d.) reveals that both the United Kingdom and the Republic of Ireland have submitted additional estimates for recently controlled compounds. The United Kingdom's estimates now include benzethidine 5 kilos, furethidine 5 kilos and phenazocine 3 kilos in addition to the previously published estimates (*C. & D.*, April 9, p. 389). In the Republic of Ireland's estimates, that for diacetylmorphine has been reduced from 500 to 300 gm. A new estimate for phenazocine, 250 gm., has been included.

Training for Industry

HOW EDUCATION SERVICE CAN HELP

SIR David Eccles (Minister of Education), in a circular sent to all local education authorities on June 29 suggests ways in which the education service can co-operate with industry in providing increased opportunities for young people to train for skilled employment. The circular suggests local education authorities to (1) Increase provision by secondary schools of extended courses so that young people can stay on to complete a full five-year course; (2) consider setting up one-year full-time preliminary courses in technical colleges where the grammar schools cannot provide extra facilities. Technical colleges, in collaboration with both sides of local industry, might also develop full-time

group) at the group's annual dinner and ball, held in London, on June 19. Professor W. H. Linnell (dean of the School of Pharmacy, University of London) was the guest of honour. Professor Linnell spoke of the importance of training more graduates in science and technology and quoted figures which showed how the western democracies were lagging behind countries such as Jugo-Slavia, which he had recently visited. In thanking his committee, Dr. Max Donbrow (chairman) referred to a message from Dr. J. Kohlberg (president of the Pharmaceutical Association of Israel) to the effect that the pharmaceutical group in England, considering its numbers, had done more than any other group towards the building of a new School of Pharmacy in Israel. Among the guests were Professor C. A. Keele (Middlesex Hospital, London) and Dr. Alec Lerner (chairman of the executive of the Friends of the Hebrew University).

Jewish Pharmacists

AID FOR NEW ISRAELI SCHOOL

THE pharmaceutical group of the Friends of the Hebrew University of Jerusalem have now raised £7,500 of their self-imposed target of £10,000 which is to go towards the new building that is to replace the temporary premises of the School of Pharmacy at the University. That was announced by Mr. J. Bogush (treasurer of the

Colour Television

MEDICAL APPLICATIONS IN AUSTRALIA

AUSTRALIA is shortly to have its first experience of colour television, for doctors in Adelaide, Melbourne, Brisbane and Sydney are being invited to attend demonstrations of surgical and clinical procedures by means of the medical colour television unit of Smith, Kline & French Laboratories, Ltd., whose Australian subsidiary company of the same name is located in Sydney.



JEWISH PHARMACISTS' DINNER: Shown here are some of the officers and guests at the annual dinner and ball of the pharmaceutical group of the Friends of the Hebrew University of Jerusalem. At the rear are Mr. J. Bogush (treasurer) and Mrs. Bogush, Dr. M. Donbrow (chairman) and Mrs. Donbrow, Professor A. Lerner (chairman of the executive of the Friends), Mrs. and Professor C. A. Keele (Middlesex Hospital). Seated are Professor Linnell and Mrs. D. Moushine.

Training Storekeepers

PURCHASING OFFICERS COURSE

THE Purchasing Officers Association state that their "Certificate in Store-keeping" evening classes and examinations introduced in September 1959 were widely supported by both private industry and nationalised undertakings. Courses were provided at nearly fifty technical and commercial colleges and over 500 candidates recently sat the examinations. They will be repeated during the 1960-61 college sessions and interested organisations may obtain further information from their local technical or commercial college or from the Association, Wardrobe Court, 146A Queen Victoria Street, London, E.C.4.

Retail Sales

BOARD OF TRADE STATISTICS

RECENTLY issued Board of Trade figures show that sales of chemists' goods by independent retailers were 3.85 per cent. higher in May than in April and 2 per cent. higher than in June 1959. Multiple retailers' sales were just less than 1 per cent. higher in May than in April and 2 per cent. higher than in May 1959. Sales by Co-operative societies were 2.73 per cent. higher in May than in April and 4 per cent. higher than in May 1959. The figures do not allow for receipts under the National Health Service.

A BIRMINGHAM CENTENARY

Gold watches for long-service employees

INSCRIBED gold watches were presented to employees of Laughton & Sons with over twenty-five years' service at a banquet to commemorate the attainment of the firm's 100 years in business in Birmingham. The firm Laughton & Sons, Ltd., of Warstock Road, was founded in 1860 by Stephen Jarrett, a pin manufacturer, of Gloucestershire, and Charles Rainsford, a commercial traveller, of Birmingham. The partners opened their first premises in Broad Street, where, at first, their main business was the manufacture of pins for the wholesale drapery and haberdashery houses. By 1880 the Rainsford family had control and the firm had taken larger premises in the same

street. The business was turned into a private limited company in 1898, the same year in which Mr. G. A. Laughton (who is the present chairman of the company) joined the staff at the age of fifteen as office boy. By 1929 the Laughton family had obtained control of Jarrett & Rainsford, which in the meantime had acquired Stratton's. Thus Stratton compacts, lipstick containers, etc., were added to the company's widening range of products. The 1939-45 war disrupted progress, works were demolished in enemy raids, and in temporary premises the machinery was devoted to wartime purposes. The post-war problems were tackled energetically, and eventually the firm

settled at Warstock. A subsidiary was opened in the United States and successfully broke into the vast markets there.

An employee presenting the chairman's wife (Mrs. G. A. Laughton) with a bouquet prior to receiving an inscribed gold watch at a banquet in Edgbaston commemorating the hundredth year of the business.



IRISH NEWS

THE NORTH

Health Board

A FIRM OF CHEMISTS "FINED"

A REPORT of an investigation by the services committee into a complaint by a patient against a firm of chemists that medicine prescribed for his wife was incorrectly dispensed was presented at the June meeting of the Northern Ireland General Health Services Board. The report explained that a full 16-oz. bottle of medicine had been received by the Board with the complaint. The bottle had been sealed on receipt by the Board's pharmaceutical officer and forwarded to the analyst. The complainant stated that after he had received the bottle from the chemist he saw that there was only about $\frac{3}{4}$ in. to 1 in. of sediment in the bottle. He thought the medicine was not correct because of the small amount of sediment so he telephoned his doctor to see if he had changed the prescription. The doctor said the bottle should contain half to two-thirds of sediment and told him not to use the medicine but to take it unopened to the Board. The committee considered that the chemists had wrongly dispensed the prescription and were thereby in breach of their terms of service. They recommended that £2 2s. should be recovered from the chemists. Accounts totalling £244,843

for pharmaceutical services were passed for payment. They were made up as follows: Chemists: interim (May) £202,960; balance (March) £20,605; appliances, £520; rota services, £442; No. 2 account, payments to chemists, £242; Doctors: dispensing fees, £30,321; superannuation contributions, £822; regulation 39 (3) (n) contributions, £3 10s; Less: patients' charges, £278; prescription recovery, 13s; interim payments, £10,843.

THE REPUBLIC

Trinity College

A NEW PHARMACOLOGY DEPARTMENT

A NEW department of pharmacology was opened at Trinity College, Dublin, recently by Dr. F. H. K. Greene (scientific secretary to the Wellcome Trust). A sum of £3,000 has been spent so far on construction work. A grant for that amount was made available by the Trust, and a contribution of £1,500 a year for at least the next two years, is to be given by Smith Kline & French Laboratories, Ltd., towards the maintenance of the department. Dr. J. A. McConnell (Provost of Trinity College) said it had been a reproach to the College that its pharmacological department had not been so extensively furnished or equipped as it ought to have been, and that had resulted in some criticism of the medical school. The College owed a deep debt of gratitude to Messrs. Smith Kline & French, and they were also grateful for the financial assistance given by the Wellcome Trust. Dr. Greene said the Trust had been anxious to do something for Trinity College and was happy to accept the proposal for the department of pharmacology. It will cost about £20,000 to complete the department, and work is to proceed as finances become available.

Examination Results

SUCCESSFUL CANDIDATES

THE following are the results of the First Professional examination held by the Pharmaceutical Society of Ireland in June: *First Class Honours*, Deasy, P. B.; *Second Class Honours*, Brosnan, J. G.; Harrington, M.; Mordí, O. L.; Oviásu, G. N.; Stenson, P. Pass, Biney, J. P.; Campbell, B.; Cooney, Deirdre; Cronin, T.; Goldberger, F. de B.; Hayden, Mary; Lynch, Mary R.; McDonnell, Helen; McAuliffe, M.; Meagher, P.; Murphy, A.; Sheedan, Therese; Tehan, T.; Sode, C.

IRISH BREVITIES

AN exhibition entitled "Irish Faces and Places" arranged by Ilford, Ltd., the photographic manufacturers, is being staged at the Little Theatre, Brown Thomas & Co., Grafton Street, Dublin, July 19-29; admission free.

AT a moment when modern factory space is in short supply everywhere else in the United Kingdom, Northern Ireland has five new factories ready for instant occupation and five more nearing completion. That information was given by Viscount Chandos (chairman, Northern Ireland Development Council) after a meeting of the council in London recently.

NEWS IN BRIEF

SALES of Liverpool Co-operative Chemists, Ltd., in the half-year ended March 5, totalled £27,934.

AN explosion completely destroyed a laboratory at the factory of Midland Tar Distillers, Ltd., Queensferry, Ches., on June 12.

THE Institute of Packaging is to occupy new headquarters at Malcolm House, Empire Way, Wembley Park, Middlesex, on and from July 29.

COPIES of the fourth edition of the Dental Practitioners' Formulary are now being sent to Executive Councils for issue to N.H.S. dentists in England and Wales.

THE following officers of the Society of Cosmetic Chemists were recently elected: *President*, Dr. H. W. Hibbott; *Secretary*, L. S. Smith; *Treasurer*, M. P. Bailey; *Council*, D. F. Anstead, R. Clark, R. F. L. Thomas.

SCHEDULED to be held at Alexandra Palace, London, from September 23 to October 1, the first Electrical Fair has been deferred; the majority of exhibitors having indicated that they prefer a venue in central London.

THE fourteenth congress of the International Scientific Film Association is to be held in Prague from September 16 to 24, and will include a festival of films presenting science.

THE degree of D.Sc. has been conferred on Dr. J. B. Stenlake (senior lecturer in pharmaceutical chemistry, Royal College of Science and Technology, Glasgow) by London University.

A NUMBER of international training courses are being sponsored this year by the regional office for Europe of the World Health Organisation. Topics range from anaesthesiology to zoonoses and include pest and insect control, veterinary public health and virus diseases.

COPIES of a new booklet containing a list of approved names issued since 1948, together with approved names issued earlier for substances that have not become the subject of official monographs, are available free from the British Pharmacopoeia Commission, 44 Hallam Street, London, W.1.

THE discussion group for medicinal chemistry, Department of Pharmaceutical Sciences, Pharmaceutical Society of Great Britain, met for a second time on June 15, when the subject was the mechanism of action of analgesics. Fifty-eight persons were present, including Dr. Paul Janssen, Belgium, and Drs. Freter and Wick, both from Germany.

SPORT

GOLF.—MANCHESTER PHARMACEUTICAL GOLFING SOCIETY, annual competition for the Kerfoot trophy and prize, at Buxton on June 29. J. Moffatt won with a score of 67, and J. Barradell was second.

IRISH CHEMISTS' GOLFING SOCIETY and **ULSTER CHEMISTS' GOLFING ASSOCIATION**, B.D.H. cup competition, at Dundalk golf club on July 3. *Cup winner*, D. O'Connell (14), 63; 2, D. W. Mulvey (5), 68; 3, J. P. Holland (14), 69. *Best gross (Class 1)*, T. J. Lynch, 77; *Class 2*, H. Palmer, 90. *Special prizes (Class 1)*, F. Kavanagh, 69; *Class 2*, M. Leonard, 70.

TOPICAL REFLECTIONS

By Xrayser

Planning and economics

I sympathise with Mr. W. C. D. Bain, of Aberdeen, in his desire to have a planned pharmaceutical economy in which it would be found possible to attract entrants to a profession that reaped the reward of its professional skill in the financial sense, and at the same time afforded an adequate amount of leisure, together with security in retirement (pp. 38-9). The lack of such amenities is the price one pays for sturdy independence in a world where the individual is tending to find himself a mere cog in the wheel of modern progress. Mr. Bain's references to the under-capitalised and haphazardly distributed units reflect an accurate picture of a situation that time is likely to aggravate, for capital outlay is growing with the years. It may be that the chief obstacle to the speaker's vision is the fact that pharmacy is already the victim of the planning of large financial interests. The individual pharmacist had all his eggs in one basket—he may have a spare basket or two in rare cases—whereas the large multiple or combine has perhaps a thousand well-distributed units. A change in character in a locality may break all the sturdy individualist's eggs, whereas the public limited company can close the door knowing there are 999 others to offset the closure. Alternatively, the sudden blossoming of a thoroughfare with enhanced values of properties may be beyond the financial resources of the private pharmacist, while no such obstacle hinders the large company. So do we find the main shopping thoroughfares occupied by large organisations dealing in drugs, shoes, clothing of all kinds, and those whose merchandise defies classification.

Convenience

It is evident from the official table of statistics in the National Health Service in Scotland, that the general public is being given a convenience in service not justified by the figures. If the service given was related to dispensing economics, there is no question that the public would be under the necessity of travelling considerably longer distances for its medicine. But the problem of country areas is even greater than the urban. While the closing of one or two pharmacies in the large industrial areas, due to retirement or death, and the failure to find a purchaser, can cause a certain amount of inconvenience to the public, what is to be the outcome in small country towns where there is only one pharmacy? Limitation of pharmacies could not be accomplished without planning and control, and the logical outcome of a planned service could only mean that direction to under serviced areas would become a part of that planning. The pharmaceutical needs of the country as a whole are very important, and it is the duty of pharmacy to see that they are met.

Poisons legislation

Dr. Macmorran's review of current poisons legislation, given in an address to the Edinburgh and South-eastern Scottish Branch of the Pharmaceutical Society, is extremely valuable to all practising pharmacists (p. 41). I fancy that the concise table of requirements for the four different classes of poisons will be carefully filed in most pharmacies. I agree with Dr. Macmorran that the recent changes have only "plugged the holes," and that a comprehensive review of all poisons legislation is overdue. The inconsistencies and absurdities are glaring. The slightest trace of a Fourth Schedule substance in a preparation renders it subject to the full requirement of the law, thus differing from the position in regard to some "dangerous drugs," where dilution beyond a certain concentration, in the presence of other drugs, brings a preparation outside the rigours of the law. To some extent, the recent changes bear evidence of ill-considered haste, and Dr. Macmorran is to be commended for his forthright statement that a comprehensive review is overdue. Over the years, we have come to look to Edinburgh for elucidation of changes in the poisons legislation, and it seems that Dr. Macmorran is to carry on a tradition established by the late Mr. Rutherford Hill in that field.

IN PARLIAMENT

BY A MEMBER OF THE PRESS GALLERY, HOUSE OF COMMONS

IN a written reply to MR. W. HANNAN on June 20, SIR DAVID ECCLES (Minister of Education) gave details of students under eighteen years of age on August 1, 1958, who had been released by their employers to attend courses for part-time education. Under the heading "Chemicals and Allied Industries" the figures were 8,410 boys insured at the end of May 1959, of whom 5,088 (60.5 per cent.) had been released for part-time courses by their employers during the year 1958-59. The figures for girls were 12,960 and 2,869 (22.1 per cent.). Similar figures given for "Professional and Scientific Services" were: boys, 13,900 and 3,961 (28.5 per cent.); girls, 34,760 and 11,202 (32.2 per cent.).

Synthetic Oestrogens

DR. B. STROSS asked the Minister of Agriculture, Fisheries and Food on July 7 whether he had noted that stilboestrol treated chickens were banned in some countries. MR. M. LIPTON also asked what research was being conducted into the carcinogenous effects of using stilboestrol in the production of broiler chickens. MR. J. HARE said the Agricultural Research Council was studying the problem, but there were no reports of harmful effects to people resulting from the use of stilboestrol in that way.

Proprietary Medicines

MR. F. NOEL BAKER asked the Home Secretary on July 7 about the sale of certain proprietary medicines, the formula of which had been changed, since the recent regulations were introduced, although the original brand names had been retained and in some cases similar claims continued to be made. MR. D. VOSPER (Joint Under Secretary of State, Home Department) stated the Home Secretary had no power to control the naming on advertisements of medicinal preparations, but the Working Party on the law relating to medicinal substances would review statutory restrictions on their advertisement. MR. NOEL BAKER: "Would it not be a good thing if, arising from the work of this Working Party, power was taken? Swindles are being perpetrated on the public on a considerable scale. The firm which makes the drug Persomnia, which may now not be sold without a prescription, has produced a new formula and is marketing it under the same name. There are other instances. Is it not time to take steps to protect the public from frauds of this kind being perpetrated?" MR. VOSPER said he had seen the advertisement. It was not a matter for the Poisons Board, but it might be within the jurisdiction of the Working Party.

Penicillin Royalties

MR. BIGGS-DAVISON asked the President of the Board of Trade on July 5, who were the patentees of penicillin, what royalties they had received, and on what basis. MR. J. ROGERS (Parliamentary Secretary, Board of Trade) stated that many patents had been

granted in this country for various kinds of penicillin, and their derivatives, and for methods of making them. The patents were owned by a number of people in this country and elsewhere. He had no information about which patents were in commercial use, the terms, or the amounts paid for their use.

Prescription Costs

MR. G. M. THOMSON asked a number of questions regarding prescription costs. In a written reply on July 6, MR. J. MACLAY (Secretary of State for Scotland) stated the average cost of prescriptions dispensed in October 1959 in Dundee was 2s. 3½d. per person, Glasgow 3s. 4d., Edinburgh 2s. 11½d., and Aberdeen 2s. 10½d. Since 1954, when prescribing statistics were first issued, the number of occasions in which the executive councils, on the recommendation of the local medical committees, had taken formal action against doctors for excessive prescribing was Dundee 15, Glasgow 12, Edinburgh 1 and Aberdeen nil.

A Medical Corporation

MR. W. GRIFFITHS referred on July 4 to the statement by Sir Arthur Porritt, president of the British Medical Association, at its annual meeting, describing the National Health Service as a dismal failure and suggesting the setting up of a British medical corporation, and asked if the Minister of Health would give an assurance that the Government would not contemplate such a move. MR. DEREK WALKER-SMITH (Minister of Health) in his reply, stated that presidential orations at the annual conference of the British Medical Association did not necessarily reflect the official policy of that association, and the House was fully aware of the importance of the constitutional doctrine of the control by Parliament of public money and the consequential responsibility of Ministers.

Health Centres

MR. W. HAMILTON asked the Minister of Health on July 11, what steps he was taking to encourage the building of more health centres. MR. DEREK WALKER-SMITH said he welcomed local initiative in setting up centres, especially in re-development areas and areas of large-scale new housing development.

Prices Scheme Extended

MR. M. McLAREN asked the Minister of Health what were the present arrangements regarding the prices of proprietary drugs following the end of the trial period of the voluntary price regulations scheme on June 16. MR. DEREK WALKER-SMITH in a written reply on July 11, stated he had arranged with the Association of British Pharmaceutical Industry for a temporary extension of the scheme until December 16 to allow further time for the review of the experience gained during the trial period, before arrangements for the future were settled.

COMPANY NEWS

Previous year's figures in parentheses

BRITISH OXYGEN CO., LTD. — It is proposed to subdivide the company's Ordinary capital into shares of 5s. each.

UNICHEM, LTD. — Mr. Ernest Skues, M.P.S., formerly chairman of the board, has retired. Mr. Trevor Cale, M.P.S., has been appointed chairman and Mr. J. Howard Evans, M.P.S., vice-chairman.

G. B. KENT & SONS, LTD. — Group net profit 1959, £17,384 (£11,529), after tax, £13,734 (£9,888) and dividend, 93½ per cent. (same). Current assets, £279,532 (£258,392), liabilities, £117,019 (£119,660). Both home and export sales have increased states the board.

HUGH MOORE & ALEXANDERS, LTD. — Loss for year to March 31, £3,373 (profit £2,996). Tax refund, £977 (£623). From reserves £2,000 (nil). Current assets £24,468 (£82,152), liabilities £41,482 (£110,854). Reorganisation referred to last year is now proceeding satisfactorily states the board.

W. J. BUSH & CO., LTD. — Turnover for the first five months of 1960 shows an encouraging increase compared with the same 1959 period, reports the chairman (Mr. E. L. Bush). Competitive conditions still exist, however, and they could be intensified by the effects—which Mr. Bush says he is in no position to forecast—of the introduction of the Free Trade Area and Common Market and of any restrictions on credit. In spite of those uncertainties the board's aim is to continue the policy of expansion of capacity and increase of efficiency by utilisation of the financial resources available for development. A higher turnover was obtained in 1959, and group profits were a record. Net profit was £457,978 (£313,643), the dividend is up from the equivalent of 10½ per cent. to 14 per cent., and a further scrip issue, on a one-for-two basis in "A" Ordinary, is proposed.

BEECHAM GROUP, LTD. — To join the Common Market at this late stage might present great problems but the alternatives to joining it may be most serious for the future of the country, states Mr. H. G. Lazell (chairman) in his report accompanying the accounts for the year ended March 31. The board believed that the price of joining would be worth paying and there was need "for a completely new approach based on the fact that the Common Market is 'here to stay.'" Overseas sales of the group increased by £3 millions to a record level of £15.45 millions in the year, but because of development expenditure, the increase in profit was not commensurate. He added however, that that was to be expected and the board was satisfied that the basis of substantial profitable business was now being established. So far capital expenditure of £1.5 millions for antibiotic development had been approved. Future appropriations to research, said Mr. Lazell, would reflect the board's belief that the success of the company in all the fields in which it operates depended to a large degree on the quality of its

research effort. Current expenditure was at the rate of £600,000 per year and it could be expected to increase at a rate of at least £100,000. For accounts see *C. & D.*, May 28, p. 637.

LAPORTE INDUSTRIES, LTD.—Group income before taxation for year ended March 31 was a record at £3,147,943 (£1,813,378) and the strong demand for products of the group is continuing in the current year, states Mr. P. D. O'Brien (chairman) in his statement accompanying the accounts. The group was reaping the advantage of having foreseen an increased demand for its products and of having laid down units to manufacture them, he adds. On the subsidiary, Laporte Chemicals, Ltd., the chairman states that the manufacture and sale of organic peroxide products was playing an increasingly important part in its economy. A plant to manufacture sodium chlorite was now coming into operation. At the present time, Laporte Chemicals, Ltd., had a number of developments in hand but no major capital expenditure was envisaged in the current year. Group accounts and dividend are as previously stated (*C. & D.*, June 4, p. 672).—Laporte Industries, Ltd., has offered to acquire the 5 per cent. cumulative Preference shares and the Ordinary shares of Peter Spence & Sons, Ltd. for a total of approximately £2,500,000 cash. The offer was accepted in respect of 90 per cent. of Preference and 98 per cent. Ordinary shares and has become unconditional.

BUSINESS CHANGES

S. B. PENICK & CO., 100 Church Street, New York, N.Y., have acquired a majority interest in Fine Chemicals of Canada, Ltd., Toronto.

Appointments

ILFORD, LTD., Ilford, Essex, have appointed Mr. G. W. Roome manager of their dealer/finisher sales department.

UNITED CHEMISTS ASSOCIATION, LTD., Cheltenham, Glos, have appointed Mr. C. Gordon Carr their representative in Yorkshire.

CARNEGIES OF WELWYN, LTD., Welwyn Garden City, Herts, have appointed Mr. J. D. Page their market development manager. Mr. Page took up his appointment on July 1.

EVANS MEDICAL, LTD., Speke, Liverpool, have appointed Dr. S. Z. Ileri, M.Sc., their mid-northern regional manager to control the activities of medical representatives in the Midlands and part of Northern England.

DISTILLERS CO., LTD., Mayfair Place, London, W.1, have appointed Mr. R. M. F. Fenning general sales manager (Bisol) of their chemical division in place of Mr. J. A. Harvey who has resigned. Mr. Fenning's position as marketing manager has been taken by Mr. A. A. Puddick (export sales manager) and Mr. J. Tedd succeeds Mr. Puddick.

CIBA LABORATORIES, LTD., Horsham, Sussex, have appointed the following new representatives:—Messrs. B. J. Clarke, M.P.S. (Shropshire and Worcestershire); R. C. Gill,

M.P.S. (Surrey); M. C. Harvey, M.P.S. (Berkshire and Oxfordshire); D. G. McFarland, M.P.S. (Kent); K. Moncad, M.P.S., D.B.A. (Devon and Cornwall); and A. J. Rotchford, M.P.S. (Derbyshire and part of Staffordshire).

BIRTHS

CHALMERS.—At Simpson Memorial Maternity Pavilion, Edinburgh, on July 7, to Una, wife of David H. Chalmers, M.P.S., 3 Struan Place, Inverkeithing, a daughter.

DEATHS

DORLING.—On July 6, Mr. Horace Bernard Dorling, Heath Bank, Cricket Field Lane, Bishops Stortford, Herts. Mr. Dorling was the founder and chairman of H. B. Dorling, Ltd., wholesale chemists' distributors, 325 Beckett Road, Canning Town, London, E.16.

DUNSIRE.—On June 26, Mr. Thomas Dunsire, M.P.S., Market Street, Wymondham, Norwich. Mr. Dunsire qualified in 1923.

FIRTH.—On June 17, Mr. Harry Firth, M.P.S., 18 Laburnum Grove, Chichester. Mr. Firth qualified in 1921.

JORY.—Recently, Mr. Hugh Jory, M.P.S., King Street, Millbrook, Plymouth. Mr. Jory, who qualified in 1925, was a member and past-chairman of the executive of the Cornish Pharmaceutical Committee.

LEVY.—Recently, Mr. Victor Wilfred Levy, M.P.S., 35 Roman Road, Middlesbrough. Mr. Levy qualified during 1921.

MELROSE.—On July 6, Mr. Thomas Melrose, M.P.S., St. Ronan's Mount, Innerleithen, Peebleshire. Mr. Melrose qualified in 1908.

URDANG.—On June 27, Dr. George Urdang, Ph.G., D.Sc.Nat., formerly

Director of the American Institute of the History of Pharmacy, University of Wisconsin and honorary member of the Pharmaceutical Society of Great Britain. Dr. Urdang left Germany in 1938 where he was editor of the "Pharmaceutische Zeitung" and became a pharmacist in America. He was the first director of the American Institute of the History of Pharmacy founded in 1941, and in 1947 when the University of Wisconsin created a chair for the history of pharmacy, Dr. Urdang was given the appointment. Dr. Urdang was internationally acknowledged as an expert in pharmaceutical history, and at a dinner held during 1952 to honour him on his retirement, a George Urdang medal was established as an international award to be bestowed at regular intervals "for original and scholarly works, pertaining primarily to historical or historico-social aspects of pharmacy appearing anywhere in the world."



WHEATLEY.—On July 8, Mr. John Wheatley, joint managing director of L. Leichner (London), Ltd., 30 Acre Lane, London, S.W.2, with which company he had been associated since 1930.

PERSONALITIES

MR. T. F. WEST, D.Sc., Ph.D., F.R.I.C., who has been appointed editor of *Chemistry & Industry*, is also editor of *Pyrethrum Post* and the author of the standard work on DDT, of a treatise on chemical control of insects and of a book on synthetic perfumes. He was for some years a director of Drug Houses of Australia, Ltd.

MR. D. A. HUBBARD, M.P.S., has just been appointed to the Board of CIBA

Laboratories, Ltd. He is at present in charge of production at CIBA (A.R.L.), Ltd., Duxford, Cambridge, and following the resignation at end of 1960 of Dr. N. A. De Bruyne from the position of managing director of CIBA (A.R.L.), Ltd., Mr. Hubbard will become joint managing director with Mr. R. F. G. Lee. Mr. Hubbard was educated in Cambridge and subsequently in the School of Pharmacy, Nottingham University. He joined Aero Research, Ltd. (as CIBA (A.R.L.), Ltd., was then called) as works manager in 1939 and became a director in 1958.

MR. IAN B. SMITH, M.P.S., D.B.A., has recently been appointed

advertising manager of Allen & Hanburys, Ltd. Mr. Smith served his apprenticeship with Ralph Cuthbert, Ltd., Westgate, Huddersfield, and qualified from Manchester University in 1934. He joined Allen & Hanburys, Ltd., from Duncan Flockhart & Co. as assistant advertising manager in January 1946. He has been a member of the publicity committee of the Association of British Pharmaceutical Industry since its inception and was its chairman in 1956 and 1957. He is a member of the publicity committee of the Pharmaceutical Society and serves on two of its subcommittees. He was a member of the committee which designed and produced the exhibition by the Association of British Pharmaceutical Industry when the Duke of Edinburgh presented the new Charter to the Pharmaceutical Society.



TRADE NOTES

Discontinued.—A. Wander, Ltd., announce that they have discontinued issuing Marienbad anti-obesity tablets.

Compulsory Licence Sought.—Biorex Laboratories, Ltd., 47 Exmouth Street (Mkt.), Rosebery Avenue, London, E.C.1, have filed applications for compulsory licences to enable them to continue the manufacture, distribution and sale of chlorothiazide in the United Kingdom.

Now in Tablet Form.—CIBA Laboratories, Ltd., Horsham, Sussex, have introduced Vetidrex tablets for small animal practice and for maintenance therapy in large animals. The tablets contain hydrochlorothiazide, 25 mgm. and are available in packs of twenty-five and 100.

Biological Products.—Under a recent agreement, the biological products of the Wright-Fleming Institute of Microbiology are shortly to be distributed by Beecham Research Laboratories, Ltd., Brentford, Middlesex, to whom inquiries regarding the products should be addressed.

Prices Reduced.—Merck Sharp & Dohme, Ltd., Hoddesdon, Herts. announce a reduction in price of their Decadron tablets 0.5 mgm. and Decadron-75 tablets 0.75 mgm. Owing to purchase tax exemption Virvina is also now issued at a reduced price, and the 16 and 80 fl. oz. bottles previously labelled as dispensing packs are now issued as normal packs for retail sale.

Hay Fever Therapy.—Since April of this year hydrocortisone acetate snuff capsules issued by Armour Pharmaceutical Co., Ltd., Hampden Park, Eastbourne, Sussex, have been known as Biocortar capsules. The preparation is blown into the nostrils by means of the Armour powder insufflator. The makers claim that many cases of hay fever are completely controlled in 10–14 days and that encouraging results have been obtained in the treatment of bronchial asthma.

An Invaluable Aid.—To solve a difficult problem, Johnson & Johnson (Gt. Britain), Ltd., Slough, Bucks, have introduced disposable absorbent underpads for the protection of bedding in cases of incontinence in home nursing. The absorbent underpads prevent soiled sheets and avoid much of the unpleasant work that is often inevitable in such cases.

A Re-introduction.—Cuxson, Gerard & Co., Ltd., Fountain Lane, Oldbury, Birmingham, have reformulated and re-introduced G.P. medicated toilet soap, containing the antiseptic hexachlorophene. It is claimed that daily use of the soap results in a marked diminution of the bacterial flora of the hands. Sales of G.P. soap are restricted to chemists.

On Prescription Only.—Following the publication in a daily paper on July 11 of an article on Librium, the makers (Roche Products, Ltd., 15 Manchester Square, London, W.1), again emphasise that as the drug acts on the central nervous system it should be supplied on prescription only. That

advice was given when the drug's properties and its availability were first announced (see *C. & D.*, June 25, p. 751).

Wire Display Units.—Two contemporary wire display units, one a self-service unit and the other a point of sale display aid in the form of an Olympic runner, are currently being distributed by Wright Layman & Umney, Ltd., 42 Southwark Street, London, S.E.1, in conjunction with an increased advertising programme for Wright's coal tar soap.



With Sunscreen.—Ellanby Laboratories, Ltd., 146 Holborn, London, E.C.1, have introduced a new Night Tan preparation "Night Tan Sunscreen," a liquid cream containing dihydroxyacetone for tanning, and a sunscreen element to prevent sunburn. The manufacturers claim that the consistency of the preparation makes it particularly easy to apply so that an even tan is produced in three to four hours.

Holiday Closings.—CUXSON, GERARD & CO., LTD., Fountain Lane, Oldbury, Birmingham: Works closed for annual holiday from 5.30 p.m. July 22 until 7.45 a.m. August 8 (during that time a skeleton staff will be on duty to deal with urgent orders and inquiries only).—NEWMAN LABELLING MACHINES, LTD. (formerly D. Trapow & Co., Ltd.), Queens Road, Barnet, Herts: From July 16 to August 1 inclusive. — WESTBROOK LANOLIN CO., Argonaut Works, Bradford, 4: From 5 p.m. July 29 until 7 a.m. August 15.

New Editions.—BAILLIERE TINDALL & COX, 7 Henrietta Street, London, W.C.2, have issued a new edition in the Students' Aids series, Aids to Forensic Pharmacy. PITMAN MEDICAL PUBLISHING CO., LTD., 39 Parker Street, London, W.C.2, announce that New Drug Developments, Volume II, of the 25th edition of the United States Dispensatory is to be published this year and may be obtained as a separately bound volume or as a single volume embodying volumes I and II.

American Company Forms British Subsidiary.—Mead Johnson & Co., Evansville, Indiana, U.S.A., has formed a British subsidiary, Mead Johnson, Ltd., which will be operating from 10 Upper Grosvenor Street, London, W.1, at the beginning of September. Mr. Laurence A. Coombs, who has been appointed managing director of the British company, took up his appointment on July 4. The parent company markets throughout the world some

eighty products in the pharmaceutical, cereal and vitamin fields. Their gross sales for 1959 amounted to over \$65 millions.

Bonus Offers

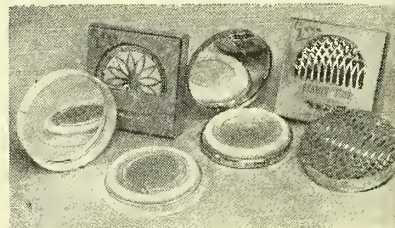
BURROUGHS WELLCOME & CO., 183 Euston Road, London, N.W.1, Marzine. Until August 31, 14 to doz. on orders of six dozen tubes or more.

NEW PRODUCTS

Parenteral Antihistamine Therapy.—Imperial Chemical Industries, Ltd., pharmaceuticals division, Fulshaw Hall, Wilmslow, Cheshire, have made available Nilergex injection for use where parenteral antihistamine therapy is indicated. Doses up to 1 ml can be given by the intramuscular or intravenous routes; if given intravenously the injection should be carried out slowly over a period of twenty seconds. Subsequent treatment should be by the oral route. Each 1-ml ampoule contains 10 mgm. of isothipendyl hydrochloride. The pack is a box of five ampoules.

Two Products.—Merrell-National (Laboratories), Ltd., 20 Savile Row, London, W.1, announce the introduction of two new products, MER-29 triparanol tablets for the reduction of excessive serum and tissue cholesterol without dietary restriction (available in bottles of thirty and 100) and Tace tablets, each containing chlorothianisene B.P.C., 24 mgm. for the treatment of the climacteric syndrome, post partum breast engorgement, prostatic carcinoma and other conditions requiring oestrogen therapy. One Tace tablet is therapeutically equivalent to two Tace capsules. The tablets are available in bottles of thirty and 100.

French Toast.—Not an edible commodity, but the name given to lipstick and eye make-up by Revlon International Corporation, 86 Brook Street, London, W.1. French Toast lipstick is described as "a rosy topaz with a touch of mocha, light enough to blend with the new beiges and golds." French Toast eye shadow is said to be "a muted light grey-brown." Liquid eye liner is also available in the same series.



"BEAUTY PUFF" COMPACTS: The new golden and "cocktail" compacts of Goya Ltd., 161 New Bond Street, London, W.1.

Without Eosin.—Innox (England) Ltd., 1 Eden Street, London, N.W.1 have introduced a colour range of lip sticks formulated without eosin which sometimes causes a reaction on those with sensitive skins. The perfumes are also specially selected to avoid reactions and a sun deflectant is included to mitigate the effect of sunlight. The available shades are Palest pink, Excitement, Pink gingham, Applejack Postman's Knock, Wild poppy, Fir coral, Mermaid pink and Red chiffon

CO-OPERATIVE CHEMISTS

Technical Panel's suggestions

THE Co-operative Technical Panel of Chemists has agreed to recommend that Co-operative societies should consider closing any of their pharmacies with a turnover of less than £200 a week. That was stated by Mr. H. Warburton (chairman of the Panel) at a Southern sectional conference of Co-operative directors held in London recently. He warned that societies would have difficulty in staffing pharmacies because qualified personnel were becoming increasingly hard to find. Future development of Co-operative pharmacy would be towards larger, modern shops in key positions, with salaries for qualified staff at least equal to those applying outside the movement. Special assistance might also be given to pharmacy students, especially to children of societies' members, who wished to enter the profession. The Panel also suggested, bearing in mind the responsibility already imposed on a superintendent chemist by the Pharmaceutical Society, that pharmacy operations should not be too directly controlled by Societies' general managers.

Mr. Warburton's remarks were amplified in the Technical Panel's annual report to the Co-operative Congress, held at Blackpool, June 6-9. The report stated: "The Technical Panel feels that a prejudice exists against being employed by Co-operative societies. This prejudice ought not to be ignored. It may be due to several reasons, but the following have been suggested as the more likely:—1, Before the war pharmacy wages and conditions in the Co-operative movement were generally better than outside; that is questionable today. 2, Many applicants for pharmacy posts dislike the movement's political affinities. 3, Many professional men with degree

status do not relish the idea of control by unqualified persons. Whilst a pharmacist is held personally responsible by the Pharmaceutical Society for the control of a pharmacy, there has been some difficulty in the past when some societies' general managers have attempted a too direct control of pharmacy operations."

The Panel stressed the importance of closing uneconomic branches. "Whilst the facts of each individual case would vary depending upon the locality and the proportion of dispensing, etc., it could be said that serious consideration should be given at the present time to the case of any pharmacy with a turnover below £200 per week. When the full effects of the new

educational policy of the Pharmaceutical Society are felt in 1962, it is understood that one of the larger multiples will close all branches with a turnover of less than £500 per week. The possibility of converting some or all of them into drug stores is not always a satisfactory solution. Co-operative societies must be prepared to examine the possibility of operating bigger self-selection pharmacies.

The Technical Panel is of the opinion that the movement should endeavour to give the customer more room to buy and the easiest way to do this is to re-model and enlarge many of the main site established chemist shops which are in first-class trading positions. Specialisation should proceed in the following categories: Toiletries, dispensing, photography, surgical appliances, fancy goods and sundries, cosmetics."

CONSUMER TESTS

Reports on mothproofers and baldness treatments

THE Consumers' Association, Ltd., report in the June issue of *Which?* (their official journal) on tests they have carried out on mothproofers and paper handkerchiefs. Of the two moth-damage prevention methods tested (moth repellents and mothproofers), *Which?* considers mothproofing a better method of preserving woollens than using moth repellents. Three tests were carried out on moth repellents using specially constructed apparatus and live moths. The result of the first showed that in enclosed and virtually unventilated space, Mothaks, naphthalene balls and paradichlorobenzene crystals were all effective in killing adult moths and preventing larvae from living. For the second and third repellency tests, Mothaks, naphthalene balls, PDB crystals and Cooper's moth powder were used. *Which?* found that PDB crystals acted

more rapidly than the other products, and that Cooper's moth powder was "not nearly as effective as any of the three other products in killing eggs and larvae on infested cloth."

Three mothproofers that are used with an ordinary hand spray, and five mothproofing liquids in pressurised packages were tested. The tests showed that one of the aerosols (Rentofab), though better than nothing, was inferior to the other four. Only two containers (Flit and Wright's) carried details of both spraying time and distance. *Which?* found the other containers seriously inadequate in their instructions. Although the aerosol method was the more expensive way of mothproofing, *Which?* considers it preferable to hand spraying because "it is not so easy to make mistakes."

To coincide with the onset of the hayfever season, *Which?* reports on paper handkerchiefs. Eighteen different sizes and types of packs (seven brands and one Woolworth's unbranded) were tested, all white. Although they were advertised for numerous other uses, the Association tested the handkerchiefs as handkerchiefs only: namely, wet strength and softness. The cost per 100 handkerchiefs ranged from 100 Kleenex Chubby at 1s. 3d. to 100 Handy Andies at 3s. 2d. Good wet strength and relative softness were found in the two Kleenex for men brands, and therefore, *Which?* considered those two packs joint "best buys."

"Preparations which claim to treat baldness can be expensive, and clinics phenomenally so. *Which?* is unable to recommend any of those tested to male members who exhibit common baldness." That was the Association's conclusion (reported in the May *Which?*) on baldness treatments. The report states more than 95 per cent. of baldness in men was not associated with ill health or disease, and there was no acceptable treatment at present for the prevention or cure of common male baldness.

"However," says the Association, "advertisers of baldness treatments,

CONTROL OF MEDICINES

Memorandum by hospital administrators

A PLEA for the consolidation and simplification of the law was included in the text of a memorandum of evidence submitted by the Institute of Hospital Administrators to the Working Party reviewing the control of medicinal substances. The Institute consider it would be helpful if the provisions of the Dangerous Drugs Act, 1951, the Pharmacy and Poisons Act, 1933, and the Therapeutic Substances Act, 1956, were brought together, and that the present regulations, rules and orders as affecting hospitals and institutions were replaced by a single statutory instrument, in which the requirements relating to hospitals and institutions were clearly segregated. That information is included in *The Hospital*, July 1960. The Institute suggest that any statutory instrument concerning hospitals and institutions should be in the simplest language possible, and cross references should be reduced to the minimum, so as to be 'intelligible to ward sisters as well as to pharmacists and administrators.' There is also a request that consideration should be given to the desirability of defining "nurse," "sister" and "act-

ing sister" in the Poisons Rules and Dangerous Drugs Regulations. The Institute state that in any new regulations, whether relating to Dangerous Drugs or other poisons, provision should be made for the transfer, whether by way of sale, notional sale or otherwise, between one hospital in the National Health Service and another. Another recommendation is that where a hospital operates a district midwifery service, the regulations should be amended to allow the hospital midwives to obtain medicinal opium, tincture of opium and pethidine, from the hospital pharmacy on the signature of the midwifery sister.

Regarding the storage of poisons in wards, the memorandum criticises present legislation which tends to lead to First Schedule poisons for internal and external use being stored together. It is suggested that poisons subject to storage restrictions in the wards should be called "restricted substances" and divided into poisons—not for internal use, and dangerous substances for internal use. Each should have its own separate cupboard and form of labelling.

although making few exact claims, appear to believe that baldness can be cured with special (i.e. their own) treatments and preparations."

CA undertook analyses of the preparations supplied with three home treatment courses. One of them, Jochem's hormone preparation, contained 5,404 i.u. oestradiol. Which? questions whether it would be desirable for men to use it continually, even in small doses.

The analyses revealed mild antiseptics in "medicated" shampoos and lotions, whose use was probably directed towards the cure of dandruff. There was no sound evidence, however, that common baldness could be prevented or cured by treating dandruff.

Sixteen bald or balding subjects, ranging in age from twenty-five to fifty-four years, carried out user tests on home treatments, or volunteered for the treatment given by two clinics. The cost of the clinic treatments was over £70 and over £130 respectively; although the initial examination was free in each case, strong persuasion was used to get the subject to start immediate treatment, and to pay in advance.

After six months' treatment, no significant improvement in the volunteers was noticed by a dermatologist, "although throughout the treatment there was constant suggestion on the part of the clinic that new hair growth was appearing, or about to appear."

GOVERNMENT CHEMIST

First report under new constitution

THE very rapid expansion during recent years in the range of synthetic drugs in commercial production has extended the work in the laboratory of the Government Chemist. That information is given in the Report of the Government Chemist 1958-59 (H.M. Stationery Office, 3s. 6d.). The responsibility for the laboratory passed from the Treasury to the Council for Scientific and Industrial Research on July 1, 1959, and the report is the first under its new constitution, and covers the period from April 1958 to December 1959. Revenue work for Customs and Excise continued to be a major activity of the laboratory, accounting for nearly half its work. The report refers to the new synthetic drugs included in the British Pharmacopoeia, 1958, the extended scope of control legislation and the lengthening schedule of exemptions from general purchase tax on drugs and medicines. The laboratory gave advice on chemistry and nomenclature to the Home Office, for the purpose of drug legislation, and to the Board of Customs and Excise, for purchase tax matters. Drugs and medical appliances, including antibiotics, for Ministry of Health stores were examined for conformity with Pharmacopoeial or other specifications, or for sterility and also

in the investigation of complaints. Arising from that work the report mentions the frequent high results for oxidisable matter in water for injection supplied in vials with rubber closures. Such trouble did not occur when closures of plastics or plastics-coated rubber were used. The increasing use of poisonous chemicals in agriculture resulted in research work in the laboratory on methods for the determination of residues and the laboratory also assisted in framing recommendations regarding the use of pesticides.

Collaborative work was also carried out and is still proceeding on wetting agents used in agriculture and on sedimentation rates for wettable powder formulations. The report also refers to the change in the manufacture of glucose from starch which has taken place during recent years. An enzymic conversion has been introduced in place of, or in addition to, the normal acid hydrolysis. The liquid glucose product from the enzymic conversion had a considerably higher content of both dextrose and maltose than that of the corresponding material derived from acid conversion. Chromatographic methods have been developed to make it possible to issue new criteria for excise duty purposes.

PHARMACISTS AT DUBLIN'S MANSION HOUSE

Reception by Alderman P. A. Brady, M.P.S.I. outgoing lord mayor

UPWARDS of 100 professional colleagues and friends attended a reception given by the lord mayor of Dublin (Mr. P. A. Brady) and the lady mayoress in the Mansion House on June 14 to mark the end of the first year in office of Dublin's first-ever pharmacist lord mayor. The guests were received on arrival by the lord mayor and lady mayoress. The pleasantly informal proceedings continued for about three hours. Those present included the president of the Council

of the Pharmaceutical Society of Ireland (Mr. H. B. Corrigan) and Mrs. Corrigan; the vice-president (Mr. Michael Costello) and Mrs. Costello; the registrar (Mr. James Coleman) and Mrs. Coleman; members of the Council of the Society; members of teaching and academic bodies; the president of the Irish Drug Association (Mr. Phil McAuliffe) and Mrs. McAuliffe; the vice-president (Mr. A. C. Hennessy) and Mrs. Hennessy; the president of the Wholesale Drug Federation (Mr. J.

Holland) and Mrs. Holland; the president of the Irish Chemists' Golfing Society (Mr. P. Fahey) and representatives of many associations from the provinces. All present were loud in their praise of the lord mayor's gracious gesture, acknowledging that throughout his year of office he had distinguished himself by living worthily up to the traditions of Dublin's first citizen, bringing prestige both to himself and to his chosen profession of pharmacy.



Above: Dr. Eva M. Philbin (University College, Dublin), Messrs. John Gaynor (law adviser to the Pharmaceutical Society of Ireland), Lyaal G. Smith, M.P.S.I. (Photographic Dealers' Association), A. W. Hughes, M.P.S.I. (Wholesale Drug Federation) and Mrs. Hughes. Top right hand: Four pharmacists who were 1939-year students meet Mr. Tom Smith, M.P.S.I. (head of the school of pharmacy at that time), Messrs. S. E. Fox, Athlone, D. J. Kennelly, Dalkey, D. P. McHugh, Athy, Tom Smith and J. P. O'Donnell, Charlestown, on whose left are Messrs. Corrigan (president, Pharmaceutical Society of Ireland) and J. Holland (chairman, Wholesale Drug Federation).

At right: Messrs. Hugh P. Corrigan (president, Pharmaceutical Society of Ireland), M. L. Cashman (a member of Council), Denis Nugent (a past-president) and the lord mayor (president 1947-49).



Consumption of Medicines

An inquiry among residents of a Hertfordshire housing estate

THE result of an inquiry, undertaken in 1954-55, when a sample of the population of a post war housing estate in Hertfordshire was asked about the kind of medicines consumed in a four-week period, as well as about illnesses and doctor consultations, are described in an article "Consumption of Medicines on a Working-class Housing Estate" in the current edition of the *British Journal of Preventive and Social Medicine*. The authors, Margot Jefferys, J. H. F. Brotherston and Ann Cartwright, considered data obtained by interviewing adults twice at an interval of four weeks. If there were any children in the family two additional visits with a similar four week interval between them were made to mothers. At the first interview an attempt was made to obtain information about the individual's health. At the second interview questions regarding new illnesses were asked, as well as details of consultations with doctors, or with hospital or other health service personnel, "and with lay people such as chemists." About a quarter of the individuals were found to have taken medicine prescribed by a doctor during the four weeks between the interviews. The proportion of individuals who had taken or used some medicine which they had obtained without a doctor's prescription amounted to about two out of every three individuals. About seventy per cent. of the children under ten years old had been given medicines of some sort, and twenty-one per cent. of them received medicine prescribed by a doctor. Medication was somewhat less frequent among boys and girls aged ten to fourteen years than among any other age group. None the less, over sixty per cent. of both sexes took medicine of some sort or another. Non-prescribed medicines were consumed by about three out of ten adults and four out of ten of the children who claimed that they had had no illness or symptoms during the four-week period. The authors state "it would seem that the habit of prophylactic 'dosing' is widespread especially where children are concerned." The theory that a person who consulted his doctor and was given a prescription for one item would also ask for and obtain prescriptions for other items that he might otherwise have bought without a prescription was not substantiated. Concerning the social characteristics of those taking non-prescribed medicine it was noted that children in large families tended to be given fewer medicines without prescription than did children in families with one or two children. There was also a slight tendency for first-born children to be given more medicines than others.

Unsuccessful Attempts

Attempts to find any distinguishing characteristics of the adult men and women who took self-prescribed medicines as compared with those who did not were singularly unsuccessful. Self medication was not, on the whole, an alternative to a doctor consultation. The majority who took medicines prescribed by a doctor supplemented them with self-prescribed medicines. Laxatives and aspirins were taken more frequently than any other type of pharmaceutical product. They were almost always self-prescribed. The authors report "Aspirins were taken for a wide variety of symptomatic conditions. Women, especially those in their thirties and forties, were the biggest consumers. . . . They also took laxatives more frequently than men; but the very young and the very old were more often involved than those in the middle years of life. Among children, those in small families were more often given aspirins; but laxatives were given with about equal frequency in different sized families. Over ninety per cent. of the children who were given laxatives, took them as a general or specific prophylaxis and not to cure constipation. Among adults, however, fifty-six per cent. of those taking laxatives said

they had suffered from constipation during the 4-week period."

The following table taken from the report shows the percentage of adults and children taking different types of medicine during a four-week period.

Type of Medicine	Adults		Children	
	Prescribed	Non-prescribed	Prescribed	Non-prescribed
Aspirin or other pain relieving powders ...	3	39	1	22
Laxatives ...	1	16	—	26
Health salts ...	—	13	—	5
Throat or cough medicines, sweets or syrups ...	3	9	5	10
Skin ointments ...	3	6	2	6
Indigestion remedies ...	2	7	—	1
Embrocation or ointment to rub in ...	3	5	1	5
Inhalants or things to sniff up your nose ...	3	5	3	3
Vitamin tablets or medicinal foods ...	2	6	1	8
Antiseptics, gargles, mouth washes ...	—	7	—	4
Surgical clothing, appliances or foot wear ...	5	1	1	—
Tonics or syrups ...	2	2	1	7
Eye lotions or eye ointments	1	3	1	2
Sedatives and sleeping tablets ...	3	1	—	—
Corn pads or anything for feet ...	—	3	—	—
Other medicine, pills, ointment ...	11	4	8	4
Number of Individuals (=100 per cent.)		1,399	1,056	

PHARMACEUTICAL SOCIETY OF NORTHERN IRELAND

C. W. Young Scholarship Fund

A MEETING was held in Belfast on July 8 to consider a proposal that the name of Mr. Charles W. Young, who for over thirty years lectured to pharmacy students at the College of Technology, Belfast, should be perpetuated. The president of the Pharmaceutical Society of Northern Ireland (Mr. J. Caldwell) was in the chair. Also present were Miss R. J. W. Barry, M.Sc., Miss A. E. Strachan, Dr. D. Hamer, and Messrs. J. Gordon, H. M. Hamilton, W. S. Johnston, S. N. Ledlie, D. Moore, M. C. Mooney, A. Templeton, J.P., and W. Gorman. Apologies for absence were received from Messrs. R. J. Jeffers, A. W. Kernahan, J. N. Patterson, W. J. Moffett and F. R. Moore, J.P.

MR. CALDWELL explained that the proposal had been considered at the June meeting of the Council (see *C. & D.*, July 2, p. 17) and the present Committee had been appointed to decide how the object should be achieved. Without having too large a committee, an attempt had been made to include representatives from the various branches of pharmacy and from the different organisations. The Committee would be quite free to act in whatever manner they considered best.

Mr. Kernahan was elected *Chairman*, Mr. Moore *Vice-chairman*, and Mr. Gorman, honorary *Secretary*. Mr. Caldwell then vacated the chair in favour of Mr. Moore.

It was unanimously agreed that a fund, to be called the C. W. Young Scholarship Fund should be inaugurated, to which pharmacists, students and some personal friends of

Mr. Young, who were not connected with pharmacy, should be invited to subscribe. Mr. Ledlie said he thought the Committee should have in mind what sum it was hoped to obtain in order that an indication could be given to subscribers of the amount expected from each.

THE CHAIRMAN said that, knowing Mr. Young, he thought it would be appropriate to devote the interest from the Fund to encouraging research at the College. DR. HAMER pointed out that, to be of real value, interest amounting to about £250 per annum would be required and he thought that would necessitate a capital sum of about £5,000. There were other research scholarships available in Northern Ireland to the value of £285 per annum. MR. TEMPLETON said he thought the Committee would have great difficulty in obtaining such a large sum but it was agreed that a target of £5,000 should be set. THE CHAIRMAN informed the Committee that support had already been promised for the Fund. He thought the Council of the Society would give a generous donation and no doubt the other organisations would help. Many Northern Ireland pharmacists now living in Great Britain or overseas were appreciative of Mr. Young's work and would be anxious to subscribe.

MISS STRACHAN said she thought Mr. Ledlie had raised an important point and that it would be advisable to indicate on the letter of appeal the amount expected of each pharmacist. THE CHAIRMAN said that there were about 1,200 names on the Register of Pharmaceutical Chemists for Northern Ireland and there would probably be another 200 pharmacists living in Great Britain or overseas. Upwards of sixty of Mr. Young's friends not connected with pharmacy would be interested in supporting the Fund. MR. GORDON said that they could suggest a subscription of £5 from each pharmacist and that was agreed.

The secretary was asked to draft the various letters of appeal and it was agreed to hold the next meeting on July 28.

NEW BOOKS

The Pharmaceutical Pocket Book 1960

The Pharmaceutical Press, 17 Bloomsbury Square, London, W.C.1. 7½ x 5 in. Pp. 576. 30s. (postage 1s. 3d.).

GENERATIONS of pharmacy students have used the *Pharmaceutical Pocket Book* as an introduction to the profession. In particular, it contains invaluable information on the activities of the Society and a summary of the various pieces of legislation covered by the examination syllabus in Forensic Pharmacy. However, the *Pocket Book* long ago ceased to be of interest only to students and it has now become a reference book for the practising pharmacist. Each successive edition has enlarged its field of usefulness to pharmacists in retail, hospital and industrial practice. The seventeenth edition, now published, is the first to be produced under the aegis of the newly formed Department of Pharmaceutical Sciences and the constantly expanding horizons of pharmacy are reflected in some of the new sections included in the *Pocket Book*. More than ever today, the pharmacist is required to read a large volume of literature relating to new drugs and the section on pharmacological terms should be of assistance to him in this task. The compilers are to be congratulated on compressing a large amount of valuable information within the compass of only a few pages. Similarly, a useful section on radiological terms should prove helpful to hospital pharmacists who may from time to time be concerned with radioactive materials. Milliequivalent concentrations are nowadays frequently used to describe the strength of intravenous transfusion fluids required for water and electrolyte replacement. The new section on milliequivalents should be useful to both students and pharmacists in understanding that method of expressing the concentrations of electrolytes and in making the necessary calculations to convert milliequivalents per litre of solution to percentage strengths. Other new sections include two which are of practical interest to the retail pharmacist. The section on bites and stings provides a ready source of information on prevention and treatment. Another section on poisonous plants should also be of value both to hospital and retail pharmacists

who may on occasion be required to advise on cases of poisoning in children.

It must always be a difficult matter to decide when a particular section has finally outlived its usefulness. Presumably, the compilers are satisfied that it is still necessary to include practical details for the varnishing and coating of pills and to provide methods for dealing with a number of incompatibilities which are seldom, if ever, encountered nowadays. A similar remark may also be made on the list of Latin abbreviations used in prescription writing. However, the section on dispensing provides a useful practical guide and particular mention should be made of the pages dealing with the dispensing of ointments and emulsions that have been re-written and now contain information on many of the new bases and emulsifying agents.

It is unfortunate that the book went to press before the recent changes in the Poisons Rules and consequently, some of the information in the section on Forensic Pharmacy relating to Fourth Schedule poisons have now been superseded. However, a small insert summarising the recent amendments to the Poisons List and Rules has been prepared and goes part of the way to correct that omission. Much of the book follows closely the style of previous editions although extensive revision has been necessary. The information on equivalent B.P. formulae has been curtailed since it is recognised that fewer official preparations are extemporaneously dispensed nowadays. The dose tables have been extended to include drugs of the British Pharmaceutical Codex as well as those of the British Pharmacopoeia. The list of synonyms has been revised and an additional list of approved names has been added. The sections on hydrogen ion concentration, microbiology, materia medica and biochemical analysis together with the tables of solubilities and other data continue to form a ready source of useful up-to-date information for the inquiring pharmacist.

It is difficult to make a general comment on a book which ranges from the theoretical considerations of hydrogen ion concentration to the more mundane problems of everyday life such as the removal of stains. However, by so doing it does give an indication of the multifarious activities of the pharmacist, although, at a first glance, some of the material included might be deemed to have outlived its function, the book remains an excellent guide to the practice of pharmacy.

Dental Practitioners' Formulary 1960

Pharmaceutical Press, 17 Bloomsbury Square, London, W.C.1. Jointly with the *British Medical Association*, Tavistock Square, London, W.C.1. 6½ x 4 in. Pp. 54. 3s. 6d.

THE publication of the fourth edition of the *Dental Practitioners' Formulary* is necessitated by the revisions carried out in the fifth edition of the *British National Formulary* and the amendments made recently to the schedule of drugs and preparations prescribable by dentists on form E.C.14. The Notes for Prescribers have been revised and their scope has been more limited to strictly dental uses than in the previous edition. There are ten new preparations and five deletions. The new preparations include an additional analgesic, paracetamol tablets. Tetracycline is included both as a tablet and as a capsule. Two antihistamine tablets have been added namely, phenindamine and promethazine hydrochloride. Three lozenges are added and include benzalkonium lozenges, B.P.C., and hydrocortisone lozenges, B.N.F., which are used for the local treatment of ulcers in the mouth. Benzocaine lozenges are added to the *Dental Formulary* and contain 10 mgm. of benzocaine in each lozenge. They are intended for the local treatment of mildly painful conditions of the mouth. Two inhalations—menthol and benzoïn and menthol and eucalyptus have been added, since dental pain is sometimes associated with sinusitis. Mouthwash of formaldehyde has been deleted together with arsenic and ipecacuanha paint, formerly used for *Vincent's angina*. Three sulphonamide tablets—sulphadiazine, sulphathiazole and trisulphonamide, are also deleted leaving sulphadimidine as the only drug of this group now in the *Dental Formulary*. The appendices include the list of prescribed drugs in the National Health Service (General Dental Services) Amendment Regulations 1960, a short list of approved names, and a note on the labelling and identification colours for medical gas cylinders.

A FELLOW OF THE ROYAL SOCIETY

WILLIAM WEST AND THE PHARMACEUTICAL BUSINESS HE FOUNDED

THE Royal Society, which is currently celebrating the 300th anniversary of its foundation, is the oldest scientific society in the world. Its Royal Charter, granted by Charles II in 1662, states that the Society's aim is the "promotion of natural knowledge."

The inaugural meeting of the Society is deemed to have been held during November 1660, when a number of persons interested in the new experimental philosophy, rather than in the writings of the great classical philosophers, decided to form a Society for Promoting Physico-mathematical Experimental learning. A list of forty names was drawn up and a subscription of a shilling a week fixed.

Prominent among the original Fellows of the Society were a number of apothecaries, and that association is echoed in the number of modern Fellows who come from within the pharmaceutical industry. A paper on that subject was presented to an evening meeting of the Pharmaceutical Society in its 1959-60 session by Dr. T. D. Whittet (see *C. & D.*, April 30, p. 510).

One former apothecary Fellow who has a strong link with modern pharmacy was William West, born in Wadsworth in 1793—a man of many interests. William West's parents were members of the Society of Friends, and he is believed to have received his education at several of the well known schools of that Society and elsewhere in the South of England. West became a pupil, at the Plough Court pharmacy, London, of William Allen, who was himself elected a Fellow of the Royal Society during 1807.

At the age of twenty-three, having completed his pupilage, West established himself as a druggist at 13 Briggate, Leeds, where he was successful in building up a sound commercial business while finding time to develop his scientific interests. Within three years, indeed, he had helped to found the Leeds Philosophical and Literary Society, and had given the first of twenty-two papers to that group. The list of papers shows the wide range of his interests:—

- 1819: On some colours for painting found at Pompeii.
- 1820: On substances from which a blue precipitate might be produced by means of heat.
- 1821: On the atomic theory.
- 1822: On iodine. Notice of the ignition of charcoal by the galvanic battery.
- 1825: On mental originality.
- 1826: The twentieth century, in verse.
- 1829: On the varieties of water.
- 1830: On the decline of the Roman empire, as related by Gibbon.
- 1831: On the boiling point of water under certain circumstances (with memorandum of experiments).
- 1832: Miscellaneous chemical observations, with experiments.
- 1833: On the intellectual capacity of the negro. Hints in support of the materiality of caloric.
- 1834: An account of the meeting of the British Association at Edinburgh. On the temperature of the tunnel of the Leeds and Selby Railway.
- 1835: On the detection of arsenic.
- 1837: On chemical notation, isomorphism, and isomerism.
- 1838: An account of the scientific proceedings of the British Association for the Advancement of Science, held at Liverpool. On the requisite arrangements for a meeting of the British Association in Leeds.
- 1840: Hints on steam-engine boilers, locomotive engines, and railways.
- 1842: Review of some portions of Professor Whewell's "Philosophy of the Inductive Sciences."

1845: Three lectures in chemical analysis.

1847: A comparison between the principal modern languages of Europe.

1851: On explosions in coal-mines.

Some papers in the above list were also read by Mr. West before members of the West Riding Geological and Polytechnic Society. The following is a list of his chief contributions to that Society:—

On the proportion of sulphur in coal.

On a remarkable case of the action of spring-water on lead. On some peculiar states of water of high temperatures, and on the freezing of water in red-hot vessels.

On water for steam-engines, its chemical analysis and some proposed remedies for the incrustations in boilers.

On a remarkable boiler-crust composed of sulphate of lime.

On explosions in coal-mines, their causes and modes of prevention.

West was for many years vice-president of the Society he founded and when he died was its president. During 1831, while still carrying on his business in Briggate, he became a lecturer in chemistry at the Leeds School of Medicine. In 1841 he was joined in business by Thomas Harvey,



who undertook the management of the pharmaceutical aspects of the business, leaving West to devote himself to analysis and pure chemistry. The partnership continued until 1846, when ill health compelled West to resign his post as lecturer at the medical school and he later retired from his commercial activities. Thomas Harvey then took over the business and was joined as partner in 1854 by Richard Reynolds. Development continued. In 1883 F. W. Branson and in 1893 R. F. Reynolds were taken into partnership, and the business in 1898 took the title Reynolds & Branson which, with the addition of "Ltd." it holds, still at 13 Briggate, today. Incidentally the original R. F. Reynolds of the business has a special claim to remembrance for his

brilliant cartoons contributed to THE CHEMIST AND DRUGGIST between 1883 and 1907.

On January 2, 1920, during the conversazione and dinner arranged by the company to celebrate the centenary of the establishment of a pharmacy at 13 New Briggate, Mr. Leonard West described episodes in the work of his grandfather. The *C. & D.* of January 31, 1920 (p. 75) records "something in the nature of profiteering, apparently, was not unknown in those days, for a certain earl had complained that he had been charged twelve guineas for a mercurial pneumatic trough which he could get elsewhere for eight guineas."

In the year that William West became a lecturer at the Leeds School of Medicine he responded to an invitation of Sir David Brewster and joined the assembly in York that brought into being the British Association. West's name is to be found in the list of members of the chemistry subcommittee of that distinguished body. Indeed, he was not the only druggist at that meeting. O. J. R. Howarth, in *The British Association for the Advancement of Science: A Retrospect, 1831-1931* records that Murchison (a trustee of the Association) wrote in a letter from York towards the close of the first meeting that he had no "memoir" ready . . . but he had found that there was present a hard-working druggist of Preston who "had made some years ago a very important observation on the existence of shells of existing species in the gravels and marls of Lancashire at 300 feet above the sea and at distances of fifteen and twenty miles from the sea."

William West's name also appears among the founders

of the Chemical Society. On February 23, 1841, a meeting was convened to consider the formation of such a society, and provisional committee issued a circular "inviting a number of gentlemen engaged in the practice and pursuit of chemistry to become original members." Seventy-seven persons, including William West, wrote indicating their assent.

West's interests were not alone scientific. In 1844 he was elected a councillor for the Hunslet Ward of Leeds; he was re-elected in 1847 and remained in office until 1850. In 1846 he received the Telford silver medal for a paper on "Water for Locomotive Engines," which he read in London before the Institute of Civil Engineers, of which he had been elected an associate member in 1842. Early in 1846 he was awarded the Fellowship of the Royal Society for "distinguished attainments in chemical science"—an honour of which he was more than a little proud, as reflected

in the following story published in the *Leeds Mercury* (October 31, 1885):—

"At a meeting held in the coloured cloth Hall Yard on the subject of National education. Mr. West, in the course of his speech, said 'They say that we (the voluntaryists of the day) are opposed to education. Opposed to education, are we? A likely story that I, the only Fellow of the Royal Society in the Borough, am opposed to education (shouts of 'Well done, Willie West').'"

William West died at his home, Highfield House, Hunslet, Leeds, on September 10, 1851, at the age of fifty-nine. By his energy and diverse interests he had well carried out the aim of the Royal Society to promote natural knowledge. His approach to that objective appears to have been eminently practical, in line with the ideas of those who, in 1660, gathered together and formed the Society for Promoting Physico-mathematical Experimental Learning that, as the Royal Society, is now celebrating its tercentenary.

HOSPITAL PHARMACY FORUM

HOSPITALS AND STUDENTS

THE publishing of the details of the new curriculum for the third year of the course for the Pharmaceutical Chemist qualification (*C. & D.*, June 18, p. 728) gives an opportunity to turn again to the question of the training of students in hospitals. Clearly the Pharmaceutical Society has attempted in this syllabus to give to the students an introduction to the three main branches of practice, thus meeting a long-standing criticism that too great a gulf was growing between the academic course and practical experience. It is interesting here to note the revolution that is taking place in pharmaceutical education. At one time, not long ago, the main part of the pharmacist's training was obtained in the apprenticeship, which lasted some three or four years. That was followed by a short college course which many regarded as less important than the apprenticeship. Gradually the importance of academic training increased and with it the length of the course and the standard of the examination. Now some attempt has been made to produce a balanced programme.

Hospital pharmacists will no doubt find some interest in those sections which refer to hospital practice. The student is to be introduced to the background history of the hospitals of Great Britain and to their present organisation under the Health Service. Though much of the material is of a general cultural character rather than specific professional training, its inclusion in the syllabus is valuable in that it might inculcate a sense of tradition and of vocation. No doubt some teachers of pharmacy will look at the syllabus with some misgiving, for it contains material with which they themselves may be unfamiliar. It is one thing to lecture on the written enactments which brought about the Health Service, and quite another to give a balanced appreciation of the rôle of the pharmacist in that system. Here is an opportunity for a long-needed liaison between the hospital pharmacists and their teaching colleagues. It would be good for both if those teachers responsible for that part of the course were to spend a little time in hospitals to see at first hand the problems that arise and how the pharmacist fits into the very complex team which constitutes the professional staff of a hospital. In that respect small hospitals are as important as the large ones, though naturally the range of pharmaceutical activity will be greater in the latter. Hospital pharmacists in turn would benefit by having the teacher in their department for a week or two, not only because of the assistance he may give with the routine work, but because of the even greater help he would bring by his criticism and suggestions emanating from his specialised experience.

Already a number of hospitals in London and in the vicinity of the principal schools of pharmacy regularly receive groups of students as visitors. Unfortunately such visits are usually made on one half-day in the Easter vaca-

tion as part of a tour including works-visits and a night at the theatre. The affair has the air of an outing and to some the quality of the tea may be the criterion by which the attractions of hospital pharmacy are measured. Smaller groups of students coming for several half-days or even complete days to work in the department would benefit to a much greater degree. An experiment of this kind has been made by one hospital and might well be extended to others. Given an organised programme it should not be difficult for the chief pharmacist of the hospital to devise, in collaboration with the lecturers, a scheme of work which would fit into the college curriculum and which would illustrate in practice much of the teaching. For example, a group of six students could well be employed for a day in preparing a hospital-size batch of normal saline or other injectable fluid, another group on bulk-preparation of B.N.F. mixtures or other formulations, and one or two at a time could be put on dispensing duty along with an experienced pharmacist. The main difficulty in the past has been the lack of time in the over-crowded course and the lack of detailed organisation in the hospital to meet the students' needs.

Much has been said and written of the shortcomings of hospital practice as a career: most of it can be summarised in terms of cash. Unfortunate as this is, it is still true to say that there are few occupations in pharmacy which compare with hospital for interest, variety and satisfaction. A well-run hospital department is a microcosm of the whole profession in which a student may experience the practical application of the knowledge gained during the curriculum. The time has surely come when the potentialities of the hospitals as a training ground for pharmacists should be developed to the full. The concentration of patients into one place, the variety of diseases, and the presence of experienced doctors as teachers have long made the hospitals the most important schools for medical students. Similar considerations apply to pharmacists and practical steps should be taken, so that whatever branch of the profession is eventually chosen by the student, he will enter it with some understanding and experience of its ultimate object: that of providing the means of healing patients. There are difficulties in this as in any new project. Some schools of pharmacy have suitable hospitals within easy distance where the whole of their students could be catered for in the manner suggested. In other cases two or more smaller hospitals may be brought into use. There remain one or two colleges in towns which lack hospitals of suitable size to run a comprehensive pharmacy and some thought would have to be given in such cases as to how the existing or potential facilities could best be organised. If the principle were accepted there is little doubt that these practical difficulties could be overcome.



The CHEMIST AND DRUGGIST

For Retailer, Wholesaler and Manufacturer

ESTABLISHED 1859

Published weekly at

28 Essex Street, Strand, London, W.C.2

TELEGRAMS: "CHEMICUS ESTRAND, LONDON"

TELEPHONE CENTRAL 6565

Pharmacists of the Future

ALTHOUGH grammar school teachers are now more conversant with the possibilities of pharmacy as an interesting and rewarding career than at any time in the past, many prospective pupils and their parents will rightly want to know more about the practical side of the craft. Whether the seed sown by the schoolmaster finally germinates will largely depend on the pharmacist whose advice on this subject is so frequently sought at this particular time of the year. In this issue we focus attention, as we do each July, on the opportunities provided to young people for studying to become a pharmacist. On other pages are given notes on the training centres in Great Britain for the Pharmaceutical Chemist Diploma and academic examinations in pharmacy, a brief guide on the conditions of entry, the subjects for study and the various fees to be met along the road to the final registration as a pharmacist whether it be in Great Britain, Northern Ireland or the Republic of Ireland.

Changes in the training curriculum are constantly taking place and rightly so for it is patently obvious that young pharmacists should have an acquaintance of, and be examined in, the latest drugs as well as the latest techniques of their production.

The Pharmaceutical Society of Great Britain has come in for a lot of criticism lately particularly from the retail section of its members that the new educational requirements are set too high. The raising of the standard of entry to Advanced Level—General Certificate of Education, the critics say, cuts out many likely candidates. Surely that is not so for if the candidate finds difficulty in reaching that standard at the outset he is going to be in difficulty when he moves on to the qualifying examinations. That the three-year full-time course is too long is another criticism but we are sure that a better pharmacist will emerge since there will be less need for intensive cramming and more time for reading and private study. Furthermore the rapid and continuing growth of new drugs must inevitably lead to an expanding syllabus.

Perhaps the most controversial point in the new regulations is the fixing of one year for practical training which may be undertaken in a retail pharmacy, a hospital pharmaceutical department or in a manufacturing laboratory. The opponents argue that the pharmacist having passed his examination and satisfactorily completed his one-year training in, say, a laboratory, is placed on the register. Yet he is quite inexperienced in retail practice but being qualified he can command all the benefits therefrom. Theoretically that argument is sound

but in practice it will be found to be less so. By the time the student has passed all his examinations, and it must be remembered that in preparation for the final one he has had to cover the recently published Section K of the pharmaceuticals syllabus (*C. & D.*, June 18, p. 728), he will have made up his mind which section of the profession he intends to join and will seek to do his practical training in that section. For the occasional person who decides to change, the size of salary offered is the all-important factor. Experience must be paid for by both sides.

Although the present syllabus has imperfections, some of which from a teacher's point of view are mentioned by Mr. Oliver on p. 75, it should result in providing pharmacists well equipped to undertake whatever branch of the profession they choose to practise.

Seeking Efficiency in Distribution

It has been clear for some time that there is a positive need for the individual retailer to consider the means necessary to bring about a greater measure of efficiency in distribution. Large distributive concerns have been allocating sums of money annually in the quest for greater efficiency, and their continued appropriation of finance with that object in view confirms that the expenditure has proved worthwhile. The British Productivity Council has been encouraging interest in the subject by means of lectures, courses, booklets and films, while local productivity committees have implemented their action. The board of the National Chamber of Trade has now put forward a scheme, the object of which is to create an opportunity for all their members, both large and small, to bring about an even greater degree of efficiency in their businesses. A firm of management consultants has been engaged to carry out extensive investigations in the distributive trades. Their first requirement is fundamental and practical information concerning the current situation and this is to be obtained by the detailed examination of twenty-four firms. The firms are to be chosen by the Chamber and the consultants, from those who apply for inclusion in the scheme. They will be required to contribute £105 each towards the cost of the survey. At the end of each individual survey the firm concerned will be presented with a complete and comprehensive report; the whole scheme being carried out on a confidential basis. The information obtained from the individual surveys will be collated and form the basis of a text book. The book, which should prove of considerable advantage to every retailer, will include chapters on such matters as lay-outs, presentation, staff activity, storage, stock control, merchandising, buying, book-keeping and office work, as well as the financial structure of the business.

It has been stated that 80 per cent. of the work in retailing is the same irrespective of the type of trade; the remaining 20 per cent. being specific to each trade. The Chamber hopes that each trade association will ultimately complete the proposed investigations by producing constructive advice and information relative to their own trades. We too hope that the organisations concerned with retail pharmacy will give their support in this to help the independent retailer to maintain his financial place in the life of the community, for it is a well known fact that published figures reveal only too clearly that the smaller trader is losing ground year after year.

The Rôle and Problems of the . . . **PHARMACEUTICAL SOCIETY OF GREAT BRITAIN** *. . . in setting Educational Standards*

C. W. MAPLETHORPE, F.P.S.,

Chairman, Pharmaceutical Society's Education Committee

TO provide a planned programme of education is one of the main functions of any professional body, for it forms the basis for the respect and confidence which the community places in the services rendered by its members. Education ensures a high level of technical ability and a desirable degree of uniformity of purpose and performance. The need for setting educational standards has long been recognised. Very early in the history of organised pharmacy the guilds set themselves the task of protecting the public from frauds and unscrupulous exploitation by increasing the proficiency of their members and by raising the status of their craft. Special regulations were incorporated in the Edict of the Emperor Frederick II (1224) safeguarding the competence of the "Confectionarii." Adequate and supervised training was made compulsory in the interest of uniformity in the dispensing of medicines. To their great credit, the guilds were quick to recognise that the status of a calling depended almost entirely on the quality of its services and on the personal integrity of all its members.

With the emergence of pharmacy from an ancient craft to a calling based on the principles of modern developments in the field of Science and Medicine, not only did the need for setting educational standards increase but the actual scope and the direction of the educational programme had to take account of developing trends. No longer was it sufficient for a pharmacist to detect adulterations of drugs by visual inspection alone. No longer was it adequate to receive a training by a master, however conscientious, who acquired his own knowledge more than a quarter of a century before. If pharmacy was to keep abreast with the ever-increasing knowledge which began to accumulate on all subjects connected with health and disease and with the many new substances which were being used in medicine, the pharmacists' educational programme had to be adapted to those modern needs. In fact, progress became so rapid that practical experience was soon outdated. "The detection of adulterations," said Jacob Bell in 1841, "is one of the most onerous duties of the pharmaceutical chemist and it is one which requires besides chemical knowledge a practical acquaintance with the sensible properties of all substances used in medicine." The young pharmacist was not only obliged to learn from current practice but he also had to be trained methodically.

In looking at the requirements for pharmaceutical education at the present time, we must remember that until 1919 no evidence of academic study was required for admission to the Society's examinations, only evidence of apprenticeship. Candidates for examination obtained their theoretical and, indeed, to some extent their practical knowledge of certain of the subjects by any means available to them. It could be by private study or by courses of varying length and type at schools of pharmacy, the courses usually being of three or six months' duration but never exceeding one year. Exceptionally, there were in addition those who after the Minor Examination pursued a course of study of six months' duration for the Major Examination. The apprenticeship, on the other hand, was usually for a period of four to five years in one establishment.

Pharmaceutical education became to some extent identified with apprenticeship. With the introduction and later the extension of the compulsory academic courses, the view that the apprenticeship was the important period of training still remained, in spite of evidence to the contrary. At the same time there has been the belief that one of the

main objects of our educational system was to produce a person primarily skilled in dispensing. As a result, the general opinion of pharmaceutical education has been that amongst other items of training must be the experience of dispensing in actual practice before a student can be registered as a pharmacist. That conception of education is out of date today and the new three-year academic course including as it does Section K (see *C. & D.*, June 18, p. 728), provides the opportunity to learn sufficient about the practice of pharmacy and about dispensing for all practical purposes. The value of the year's post-graduate practical training in whatever branch of pharmacy, added to the years of academic work and examination, is to provide an opportunity to develop judgment and responsibility. It is the duty of the Society to adjust its educational standards to this end and to train the pharmacist in such a manner that he can fully appreciate the significance of the new developments which the future may bring. This has been the aim of the Society's educational policy in recent years and Section K of the syllabus, in particular, reflects that trend. We must remind ourselves that the purpose of our Diploma is to produce a pharmacist capable of practising in all branches of the profession.

The student must be trained to view all aspects of pharmacy and to consider the interest of the profession in general. He must learn to appreciate that problems apparent in one branch of pharmacy have many and varied direct implications on the practice of pharmacy as a whole. He must be made to recognise that knowledge of modern methods of organisation and management are as essential to the future of our calling as are professional integrity, scientific achievements and technical capabilities.

Little Change

The rôle of the Society in setting educational standards has not changed materially since the years when that function was in the capable hands of the ancient guilds. What has changed, however, is the magnitude of the problems which arise when a new policy is introduced. The speed with which changes occur in modern times calls for a more drastic revision of the Society's educational programme in the light of ever-changing circumstances. Unfortunately, changes cannot materialise and bring long-term benefits without repercussions and without short-term organisational difficulties. Standards must be high enough to maintain the status of the profession but they must not be too high to discourage entrants and to deplete the profession beyond a level at which pharmacy cannot function effectively.

It is sometimes difficult for those engaged in day-to-day operations to appreciate the changing pattern of pharmacy and the demands which the future will make on our calling. Even today, it is still felt by some that practical experience is the life blood of our profession and that the scientific approach is unnecessary. Sir Frederick Hooper reminds us that it takes a rare mind, the mind that occurs a few times in each generation, to distil sound principles from current practices and events. "Apples," he says, "had been falling to earth for some thousands of years under the eyes of most acute observers, before Newton deduced the principles of gravity and motion."

If pharmacy is to survive as an independent profession in the future, pharmacists must have received an education which allows them to meet new problems with an inquiring and scientifically trained mind. To achieve that object is the true function of the Society.

*Problems of the . . .***NEW QUALIFYING EXAMINATION REGULATIONS***. . . from a Teacher's point of view***F. H. OLIVER, B.Pharm., B.Sc., F.P.S.***Head of Pharmacy Department, Sunderland Technical College*

THE decisions of the Council of the Pharmaceutical Society of Great Britain to lengthen the course for the Qualifying Examination is bound to have wide repercussions on the profession. It is encouraging to note that already the higher standard of training the pharmacist has been recognised by the Burnham Committee who have accepted the new Diploma as a degree equivalent.

Any new course of necessity presents the teacher with a number of problems. Some can be foreseen but many only become apparent as a result of actually running the course. These notes are based on experience gained from the first two years of the course and as unforeseen difficulties are likely to arise in the final year some of the views expressed may need modification next year.

Syllabuses are organic and therefore take time to grow. The printed word is only a guide to the teacher and examiner and not until it has been implemented and tried does a syllabus come to life. At least five years' experience by teachers, students and examiners must be obtained before a syllabus can be considered to be really established. During the trial period all the authorities involved must be prepared to experiment.

Difficulties of Organisation

Most of the difficulties of organisation arise from the fact that the student is faced with an external examination at the end of the first year of his course which does not include pharmaceuticals yet by the end of the second year of the course the student must have received approximately 600 hours instruction in that subject. Thus teaching of pharmaceuticals is best spread over the first two years of the course but the absence of the examination may well encourage weaker students to neglect this, the central subject of his course, in order to concentrate on the subjects in which he is being examined first. If only those subjects which occur in the examination at the end of each particular year of the course are taught during that year the problem is solved but that not only confronts the second year student with approximately twenty hours per week in pharmaceuticals but also leads to a very unbalanced time table which must read somewhat as follows:—

<i>Hours per week devoted to each subject</i>	<i>First Year</i>	<i>Second Year</i>
Pharmaceutics	—	20
Pharmaceutical chemistry	9½	9
Physiology	9	—
Pharmacognosy	3½	3½
Total (excluding liberal studies and tutorials)	22	32½

Similar difficulties arise with physiology in which the examination comes at the end of the first year. This means that the pharmacy students are required to assimilate the subject in three terms while medical students are allowed five or six terms in which to acquire a similar standard of knowledge. The teacher has to cover the full physiology syllabus in one year and there is a gap of twelve months before the student applies his physiological knowledge to a study of pharmacology during his final year.

Another serious problem is the difficulty of transferring students from a Degree in pharmacy course to the course for the Qualifying Examination of the Pharmaceutical Society. Many students who commence the Degree course find that they have more aptitude for the practical rather

than theoretical aspects of the subject and therefore wish to transfer to the Society's Diploma course. In the past it has been relatively easy to transfer but under the new regulation a student who wishes to transfer to the course for the Society's Qualifying Examination may find it necessary to recommence his course from the beginning with the addition of as much as two years to his full time studies. That might well mean that a number of young men and women who would have made good pharmacists are lost to the profession.

The subject pharmacognosy presents the teacher with three problems. First, while it is possible to cover the syllabus matter in the minimum time suggested it does not allow for a very coherent treatment of the subject. However, there is now sufficient time during the course for pharmacognosy to be allocated the extra hours needed to improve the teaching of the subject. The second problem (and more difficult to overcome) is caused by the examination coming at the end of the first year of the course. This greatly restricts the freedom of the teacher in choice of the order which he teaches the subject and many aspects of the subject which should be treated as one unit have to be split so that part may be covered in the first year for the Part I Examination while the remainder must be left until the second year of the course. Lastly, it is difficult to co-ordinate the theoretical and practical aspects of the subject during the first year of the course.

Pharmaceutical chemistry can be readily divided into pure chemistry which is studied in the first year and applied chemistry which is left until the second year of the course. This subject presents few teaching problems. It has the advantage of being the only subject with an examination at the end of each of the three years of the course. In the third year of the course pharmaceutical chemistry is mainly concerned with drug action and chemotherapeutics and it will be difficult to decide which aspects of those subjects should be covered in pharmacology and which in pharmaceutical chemistry. The inevitable overlap may be an advantage as it should encourage the student to think of pharmacy as a whole and not a collection of separate subjects. Students are far too ready to keep their knowledge in watertight compartments and are reluctant to apply knowledge acquired under one heading to another subject.

As has already been explained the main problems in teaching physiology and pharmacology are the difficulty of covering the physiology syllabus in one year and the gap of three terms between the physiology examination and the commencement of the pharmacology course. The two subjects may be linked by the introduction of some pharmacology into the second year and by spreading the practical physiology over the first two years of the course but that does impart continuity and means that the student is examined in physiology before he has completed all the relevant practical work.

As might be expected pharmaceuticals raises most problems. For many years the teaching of pharmaceuticals has been tied to the British Pharmacopoeia and now the Pharmaceutical Society has very wisely decided that the time has come when the teaching of this subject should be more closely related to the everyday practice of pharmacy. Students must, therefore, study the British National Formulary and the Drug Tariff as well as the Pharmacopoeia and the Codex.

Microbiology and general pharmaceuticals present no serious problems but there are two aspects of the work, new to pharmaceutical examinations, that present a challenge to the teacher. The first is the subject called "dispensing practice" which requires a knowledge of dispensing as carried out in retail and hospital practice today. This necessitates instructing the student about some of the proprietary articles he may be called upon to dispense when he leaves college. The teacher has three problems to solve: Which proprietary articles to include in his course; how to keep the list up-to-date; and how to teach the student to dispense the articles. If he does more than ask the student to select the correct preparations and write the appropriate label the teaching of this aspect of pharmaceuticals could become very expensive.

The second branch of pharmaceuticals requiring special treatment is called the "practice of pharmacy" and consists partly of material formerly included in the Forensic Pharmacy Syllabus and partly of new material. There are always difficulties in teaching a new subject and the pharmacy teacher will most probably have to seek assistance from several experts. Paragraphs in the syllabus headed "Ethics and Professional Conduct," "Pharmaceutical Organisations and Representative Bodies," "Hospital Pharmacy," "Professional and General Liabilities," "Stock Control," "Medicinal Gases," "General Practice of Pharmacy" and "Pharmaceutical Industry" each requires its own expert and while there may be some difficulty in arranging a time-table, few schools are likely to encounter real obstacles in obtaining the necessary assistance. The

member of College staff responsible for teaching the remainder of the "practice of pharmacy" syllabus will also have to co-ordinate the teaching of the various experts. Where requests for such assistance have already been made, the warmth of the reception and the enthusiasm with which help has been offered has been most encouraging.

One of the many advantages of this closer alignment of teaching to, current pharmaceutical practice should be the encouragement of more teachers of pharmaceuticals to spend some time each year in a retail, industrial or hospital pharmaceutical department in order to keep his knowledge of the subject abreast of modern advances. At one time it would have been difficult for colleges to assist their staff to obtain that experience for in most schools there was only one member of staff for each subject, but conditions being now improved College authorities encourage their staff to maintain close contact with industry. No school which is prepared to accept the stimulus and challenge of the new syllabus should experience insuperable difficulties. All pharmacists as well as teachers and students should benefit from the closer contact between College staff and those engaged in pharmaceutical practice arising out of the new examination regulations.

The difficulties described can and will be overcome and if the new syllabus is implemented in the spirit in which it was drawn up, the pharmacist will be able to continue to make his unique contribution to the health of the nation as the expert on drugs. The student who qualifies under the new regulations will be well equipped to undertake whatever branch of the profession he chooses to practice.

QUALIFYING IN PHARMACY

The requirements for registration in the United Kingdom and Ireland

INFORMATION ON FURTHER STUDY AND ALLIED PROFESSIONS

STUDENTS in Great Britain who have decided to take up pharmacy as a career should first register as a "student" with the Pharmaceutical Society, 17 Bloomsbury Square, London, W.C.2. A typical standard for entrants in England and Wales is a pass in the General Certificate of Education at Ordinary level in English language, mathematics and a language other than English and at Advanced level in each of the subjects chemistry, physics and either biology, botany or zoology. The Society has its own Entrance Examination so that students who have attained the Advanced level of General Education but whose subjects differ from those above can take the examination in the outstanding subject or subjects.

Students from Scotland should have obtained a Leaving Certificate with passes on the higher standard, obtained at not more than two sittings of the examination, in English, a language other than English, mathematics and one other subject. An acceptable alternative is a Leaving Certificate with three passes on the higher standard (one of which must be English) plus two passes on the lower standard at not more than two sittings. The subject passed must include mathematics and a language other than English. The student must then pass either the Society's Entrance Examination in all subjects to qualify for registration as a student or pass the appropriate subjects in the G.C.E. at Advanced Level. The Society's Entrance Examination (subjects are chemistry, physics and biology) is held in March, June, September and

December. The fee for registration as a "student" is £4 4s.

Three-year Course

The next step for the student is to attend a full-time course at a school of pharmacy for the Pharmaceutical Chemist Qualifying Examination. The subjects for study are pharmacognosy, pharmaceutical chemistry, physiology, pharmacology and pharmaceuticals. The course extends over three years and is divided into three parts. The student is examined in pharmacognosy, pharmaceutical chemistry and physiology at the end of the first year (written papers only); in pharmacognosy, pharmaceutical chemistry and pharmaceuticals (written and practical) at the end of the second year; and at the end of the third year there is a written examination in pharmaceutical chemistry, a written and oral in pharmacology and a written, practical and oral examination in pharmaceuticals.

Examination fees are £2 2s. for each subject in the first year and £3 3s. per subject for the following years. As well as passing the Qualifying Examination a student must complete a course of practical training of not less than one year before being admitted to the Pharmaceutical Register.

Practical Training

The training can be done in a pharmacy, a hospital pharmaceutical department or a pharmaceutical manufacturing laboratory, either before or after the three-year full-time course of study. Particulars as to the place where training is to be done must be submitted to the Secretary and Regis-

trar of the Society. On completion of the year's practical training registration as a pharmacist can be effected on payment of £5 5s. each year.

Degrees in pharmacy are awarded from the Universities of Glasgow, Leeds, London, Manchester, Nottingham and Wales. Graduates holding these degrees may apply for registration as a pharmacist, but they must first complete one year's practical training and pass the Pharmaceutical Society's Qualifying Examination in forensic pharmacy. To a small extent the entrance requirements of the universities differ slightly from those required by the Pharmaceutical Society and particulars should, therefore, be sought from the university where the student intends to study.

There are technical colleges in all large cities where a student may receive tuition for the Society's Entrance Examination. A list is given on page 78, with the name and the head of department and (where available) the date when the next session starts.

For the three-year qualifying course there are eighteen schools of pharmacy in Great Britain including the five university schools mentioned above; particulars of these are also given in the same table. Normally university schools give priority to students who are to read for the degree in pharmacy awarded by that university, but some of the technical colleges take students for the external degree awarded by the University of London.

Demand for places whether at technical college or university is usually in excess of places available and early

application is essential; normally between October and January for the following September-October session.

Tuition Fees

The tuition fees at the schools vary considerably; in Scotland they are from £50-£55 per session and in England they vary from £26 to £38 for the Society's diploma according to the school. For the Degree the cost is around £66 per year. Those figures do not include cost of residence and the total cost might well be from £300-£400 per year. There are grants and scholarships including State scholarships available which may cover maintenance as well as fees, and advice about these should be sought from the local education authority. Many of the colleges also give prizes annually to students of suitable merit.

Persons registered as students under the regulations in force before March 1, 1958, are being given reasonable opportunity to qualify under those regulations.

Northern Ireland

Registration as Student

To be eligible for registration as a "Student" a candidate must have passed in the following subjects of one of the recognised examinations: English language, a mathematical subject, physics, chemistry and any other subject.

If the five subjects have not been taken at the one occasion then at least one of the subjects must have been passed at Advanced level or marks equivalent to the credit standard in the Grammar School Senior Certificate Examination of the Ministry of Education for Northern Ireland must have been obtained in at least two of the subjects taken at Ordinary level. The following examinations are recognised:

The Grammar School Senior Certificate Examination of the Ministry of Education for Northern Ireland.

The Leaving Certificate Examination of the Scottish Education Department.

The General Certificate of Education Examination of the following examining bodies:

- University of Bristol.
- University of Durham.
- University of London.
- Cambridge Local Examinations Syndicate.
- Oxford and Cambridge Schools Examination Board.
- Oxford Local Examinations Delegation.
- The Associated Examining Board for the General Certificate of Education.
- Joint Matriculation Board of the Northern Universities.
- Southern Universities Joint Board for School Examinations.
- Welsh Joint Education Committee.

Part I Qualifying Examination

After registration the student must attend a one-year full-time course of instruction in the subjects biology, physics and chemistry. A student who has failed on three occasions to pass the examination may be permitted a fourth attempt only if so recommended by the board of examiners. A student who has passed the examination must

then serve an apprenticeship for two years under a registered pharmacist.

Pharmaceutical Chemist Qualifying Examination

After completion of apprenticeship the student must attend a two-year course of study for the Part II Qualifying Examination which is divided into Part A and Part B. The subjects of the examination are:

Part A: Pharmaceutical chemistry I, pharmaceuticals I, pharmacognosy and physiology.

Part B: Pharmaceutical chemistry II, pharmaceuticals II, and pharmacology.

A student who passes the Part A examination or who fails to satisfy the board of examiners in only one subject may attend the course of instruction in the Part B subjects. A student who fails to satisfy the board of examiners in two only of the Part A subjects must re-attend the course of instruction in those subjects before again presenting himself for examination. He may at the same time attend the lectures in pharmacology. If a student fails to satisfy the board of examiners in three or more of the Part A subjects he must re-attend the course in all four subjects before again presenting himself for examination. On passing the Part II Qualifying Examination, provided he is not less than twenty-one years of age, the student is eligible to be registered as a Pharmaceutical Chemist. A person who has passed the final examination for the degree of pharmaceuticals of the Queen's University, Belfast, and who satisfies the examiners in such other subjects as the Council may determine shall, if his apprenticeship is completed, be eligible for registration as a pharmaceutical chemist.

Fees

For registration as a student the fee is £4 4s. The fee for Part I Qualifying Examination is £6 6s. for the first occasion and £4 4s. for subsequent entry; for the Part II Qualifying Examination the fee is £3 3s. for each subject.

Republic of Ireland

At present students in the Republic of Ireland are required to attend the College of Pharmacy for two academic years and to devote three years to practical training in a pharmacy. For some time past the Council of the Pharmaceutical Society of Ireland has intended to increase the academic course to three years, with a corresponding reduction in the period of practical training. This year, however, it was decided to introduce a university degree course in collaboration with University College, Dublin (a constituent college of the National University of Ireland). It was decided also to reduce the period of practical training to one year. This would mean that a student could obtain a degree of B.Sc.(Pharm.) at the end of the third year, would then proceed to a year's practical training and would finally enter for an examination in forensic pharmacy to secure the Licence of the Society. The scheme has been submitted to the Department of Health and approval is awaited.

The existing regulations are that a student must pass the following examinations: a Preliminary Examination; a pre-Registration Examination; a First Professional Examination and a Second Professional Examination.

The Preliminary Examination may be either the Leaving Certificate of the Department of Education or the Matriculation Examination of National University, provided the candidate has passed in Irish, English, Latin, mathematics and a fifth subject.

A Pre-Registration Examination is conducted by the Society. The subjects are physics and chemistry and the standard approximates that of the Matriculation Examination. A candidate who has passed physics and chemistry in a Preliminary Examination or in specified university examinations or who has passed general science in the Leaving Certificate Examination is exempted from the Pre-Registration Examination. A student who has passed the combined physics/chemistry paper of the Leaving Certificate Examination before October 1959 may apply to National University for a Certificate showing credit for either physics or chemistry; the remaining subject must then be passed prior to Preliminary Registration.

A student applying for Preliminary Registration must submit certificates showing that he has passed the subjects of the Preliminary and Pre-Registration examinations, a birth certificate and a fee of £4 4s. The registered student then attends the Society's College for a full-time day course which commences in October and terminates at the end of June. The student gains credit for the science course by passing the term examinations and the First Professional Examination. Successful candidates must enter into articles of pupilage with a pharmaceutical chemist to serve a period of three years as an apprentice in an approved pharmacy. A student who has completed the period of apprenticeship returns to the College of Pharmacy for the Pharmacy Course, which commences in October and ends the following July. The Pharmacy Course is in preparation for the Second Professional Examination. A student who passes the Second Professional Examination is eligible for registration as a pharmaceutical chemist. It takes five years for a registered student to become a pharmaceutical chemist.

FEES: Preliminary Registration—£4 4s. Science Course—£63. 1st Professional Examination—£6 6s. Pharmacy Course—£63. 2nd Professional Examination—£6 6s. Registration as a pharmaceutical chemist—£10 10s.

A student who has completed apprenticeship may enter for an examination leading to the qualification of Assistant to a Pharmaceutical Chemist. Alternatively, a student may apply for registration in the Preliminary Register of Pharmaceutical Assistants and may proceed to the qualification of Pharmaceutical Assistant without attendance at the College for the Science Course. Further information may be obtained from: the Registrar, Pharmaceutical Society of Ireland, 18 Shrewsbury Road, Ballsbridge, Dublin.

COURSES FOR PHARMACY STUDENTS

1. ENTRANCE EXAMINATION

THE following table gives details of courses for the Pharmaceutical Society's Entrance Examination and its G.C.E. equivalent. Intending students should apply for places as soon as possible.

The designation of the department is indicated by the italic letter following the name of the institution:—

B=Biology;

C=Chemistry;

P=Pharmaceutical;

S=Science

Centre	Institution	Head of Department	Session starts	Enrolment
ABERDEEN ...	Robert Gordon's Technical College* <i>P</i>	D. Edwards, B.Sc., Ph.D., F.P.S., F.R.I.C.	October 4	September 1
BIRKENHEAD ...	Technical College <i>C</i>	D. G. Cooper, B.Sc., F.R.I.C., A.I.B.P.	September 12	September 5
BLACKBURN ...	Municipal Technical College <i>S</i>	A. Walton, M.Sc., F.R.I.C., Dip. Ed.	September 12	September 12
BOLTON ...	Technical College <i>C</i>	G. W. Wood, B.Sc., Ph.D., F.R.I.C.	September 12	Aug. 29–Sept 2
BRADFORD ...	Technical College <i>C</i>	R. L. Elliott, B.Sc., Ph.D., F.R.I.C., F.S.D.C., F.T.I.	October 3	October 3
BRIGHTON ...	Technical College* <i>P</i>	James C. Parkinson, B.Pharm., Ph.D., F.P.S., F.R.I.C.	September 22	September 20
BRISTOL ...	College of Technology* <i>P</i>	D. A. Norton, B.Sc., F.P.S., A.C.T. (Birm.)	September 13	Immediately
BURNLEY ...	Municipal College <i>C</i>	F. Clifford, B.Sc., Dip. Ed.	September 19	August 29
CARDIFF ...	Welsh School of Pharmacy Welsh College of Advanced Technology*	R. V. Lloyd, B.Pharm., F.P.S.	September 29	September 28
CARLISLE ...	Technical College <i>C</i>	F. H. Day, Ph.D., M.Sc., F.R.I.C.	September 19	Sept. 8 & 9
CHATHAM ...	Medway College of Technology <i>C</i>	H. I. Stonehill, D.Sc., F.R.I.C.		
CHELMSFORD ...	Mid-Essex Technical College <i>S</i>	M. R. Gridley, B.Sc., F.Inst.P.	September 19	September 15
CHELTENHAM ...	North Gloucestershire Technical College <i>S</i>	L. McPherson, M.Sc.	September 12	September 5–9
COVENTRY ...	Technical College <i>S</i>	D. O. Weitzel, B.Sc., F.L.S., M.I.Biol.	September 19	September 5
CROYDON ...	Technical College <i>C</i>	S. R. Robinson, Ph.D., B.Sc., F.R.I.C.	September 19	September 12–14
CRUMLIN ...	Technical College of Monmouthshire <i>C</i>	V. A. Hewlett, F.R.I.C., M.Sc.	September 19	September 12
DAGENHAM ...	South-east Essex Technical College <i>C</i>	J. Ratcliffe, B.Sc., F.R.I.C.	September 21	September 19
DARTFORD ...	North-west Kent College of Technology <i>C</i>	J. R. Barr, M.Sc., F.R.I.C.	September 12	September 12
DONCASTER ...	Technical College <i>C</i>	W. F. Andrews, M.Sc., B.Sc., A.R.I.C.	September 19	September 12
EDINBURGH ...	Heriot-Watt College* <i>P</i>	H. H. Campbell, B.Sc., F.P.S., F.R.I.C.	October 11	July 31
EWELL ...	County Technical College <i>S</i>	L. P. Lawrence, M.Sc., F.R.I.C.	September 19	September 12–14
FOLKESTONE ...	Technical College <i>C</i>	K. L. Scott, Ph.D., B.Sc.		
GLOUCESTER ...	Technical College <i>C</i>	R. B. Williams, M.A., B.Sc., D.Phil., F.R.I.C.	September 19	September 5–8
GUILDFORD ...	County Technical College <i>C</i>	J. C. Bevan, M.A., B.Sc., F.R.I.C.	September 19	September 12
HALIFAX ...	Percival Whitley College of Further Education	L. Hey, B.Sc., Ph.D., A.R.I.C.	September 19	September 5–8
HUDDERSFIELD ...	Technical College <i>C</i>	E. Tittensor, Ph.D., F.R.I.C.	September 19	September 12
KINGSTON-ON-THAMES ...	Technical College <i>C</i>	N. E. Lindop, M.Sc., F.R.I.C.	September 19	September 12
LEICESTER ...	College of Technology* <i>P</i>	C. Gunn, B.Pharm., F.P.S.	September 12	Before Sept. 12
LIVERPOOL ...	College of Technology* <i>P</i>	T. L. Bowyer, F.P.S., F.R.I.C.	September 12	September 9
LONDON ...	Acton Technical College <i>S</i>	J. Atchison, M.Sc., A.Inst.P.	September 19	September 6
	Northern Polytechnic <i>C</i>	W. Gerrard, D.Sc., Ph.D., F.R.I.C.	September 26	Immediately
	Norwood Technical College <i>C</i>	M. J. Birchenough, Ph.D., F.R.I.C.		
	South-west Essex Technical College <i>C</i>	S. Lewin, M.Sc., Ph.D.	September 14	September 12–13
NEATH ...	Technical College <i>S</i>	E. McCutcheon, M.Sc.		
NEWPORT ...	College of Technology	L. McGraghan, M.Sc., F.R.I.C.	September 19	September 12
NORTHAMPTON ...	College of Technology <i>S</i>	W. Siddall, B.Sc., Ph.D., A.R.I.C.		
NORWICH ...	City College and Art School <i>S</i>	R. Jones, B.Sc.	September 19	September 12–13
PLYMOUTH ...	Technical College* <i>P</i>	V. Smith, M.Sc., F.R.I.C., F.P.S.	September 12	By September 12
PRESTON ...	Harris College <i>C</i>	S. Skidmore, B.Sc., Ph.D., A.R.I.C.	September 19	September 12
REDRUTH ...	Cornwall Technical College <i>S</i>	J. R. Slater, B.Sc., F.R.S.A.	September 12	By September 12
ROTTERHAM ...	College of Technology* <i>C</i>	M. B. Thompson, A.R.S.M., B.Sc., Ph.D.	September 26	September 12
ST. HELENS ...	Technical College <i>C</i>	L. W. M. Tyrill, B.Sc., Ph.D., F.R.I.C.		
SALFORD ...	Peel Park Technical College <i>S</i>	R. M. Wall, B.Sc., A.R.I.C.	September 19	September 6
SHREWSBURY ...	Technical College <i>S</i>	P. K. Bingham, M.Sc.		
SOUTHEND-ON-SEA ...	Municipal College <i>C</i>	C. R. Barnes, B.Sc., A.R.I.C.	September 6	September 5
SOUTHPORT ...	Technical College <i>C</i>	A. E. Hollis, B.Sc.	September 5	By September 5
STOCKPORT ...	The College <i>C</i>	H. H. Armstrong, B.Sc., F.R.I.C.	September 19	September 12
STOKE-ON-TRENT ...	North Staffordshire Technical College <i>C</i>	W. K. Wilde, M.Sc., F.R.I.C.	September 19	September 12–14
SUNDERLAND ...	Technical College* <i>P</i>	F. H. Oliver, B.Sc., B.Pharm., F.P.S.	October 3	September 14
TORQUAY ...	South Devon Technical College	C. A. Colman-Porter, M.Sc., F.R.I.C.		
WEYBRIDGE ...	Brooklands County Technical College <i>S</i>	R. C. Rogers, M.Sc., A.R.C.S., F.R.I.C.	September 19	September 12
WIGAN ...	Wigan Mining and Technical College <i>P</i>	Miss E. M. Adcock, B.Sc., Ph.D., M.I.Biol.	September 26	September 8–9 and 12–14
WOLVERHAMPTON ...	College of Technology	A. G. Catchpole, B.Sc., Ph.D., F.R.I.C.	September 12	September 5
WREXHAM ...	Denbighshire Technical College <i>C</i>	E. W. Claydon, Ph.D., F.R.I.C., B.Sc.	September 19	September 12–14

*Institutions also offering a course for the Qualifying examination.

2. QUALIFYING EXAMINATION

Centre	Institution	Head of Pharmaceutical Department	Session starts	Enrolment
ABERDEEN ...	Robert Gordon's Tech. College	D. Edwards, B.Sc., Ph.D., F.P.S., F.R.I.C.	October 4	September 1
BIRMINGHAM ...	College of Technology	F. R. C. Bateson, B.Pharm., F.P.S.	September 26	No vacancies
BRADFORD ...	Institute of Technology	J. M. Rowson, Ph.D., M.Sc., F.P.S., F.L.S., F.R.M.S.	October 3	October 3
BRIGHTON ...	Technical College	James C. Parkinson, Ph.D., B.Pharm., F.P.S., F.R.I.C.	September 22	No vacancies
BRISTOL ...	College of Technology	D. A. Norton, B.Sc., F.P.S., A.C.T. (Birm.)	September 13	Immediately
CARDIFF ...	Welsh School of Pharmacy, Welsh College of Advanced Technology	R. V. Lloyd, B.Pharm., F.P.S.	September 29	September 28
EDINBURGH ...	Heriot-Watt College	H. H. Campbell, B.Sc., F.P.S., F.R.I.C.	October 11	July 31
LEICESTER ...	College of Technology	C. Gunn, B.Pharm., F.P.S.	September 12	No vacancies
LIVERPOOL ...	College of Technology	T. L. Bowyer, F.R.I.C., F.P.S.	September 12	September 9
LONDON ...	Chelsea College of Science and Technology	A. H. Beckett, D.Sc., Ph.D., F.R.I.C., F.P.S.	September 26	No vacancies
PLYMOUTH ...	Technical College	V. Smith, M.Sc., F.P.S., F.R.I.C.	September 12	By September 12
PORTSMOUTH ...	College of Technology	E. Thorpe, B.Sc., B.Pharm., F.P.S.	September 19	Immediately
SUNDERLAND ...	Technical College	F. H. Oliver, B.Sc., B.Pharm., F.P.S.	October 3	September 14

3. UNIVERSITY DEGREE COURSES IN PHARMACY

(a) Internal degree of the university.

Centre	Institution	Head of Pharmaceutical Department	Session starts	Enrolment
CARDIFF ...	Welsh School of Pharmacy, Welsh College of Advanced Technology	R. V. Lloyd, B.Pharm., F.P.S.	September 29	No vacancies
GLASGOW ...	Royal College of Science and Technology	J. P. Todd, Ph.D., F.P.S., F.R.I.C.	October 3	September 29
LONDON ...	School of Pharmacy, University of London	Professor W. H. Linnell, D.Sc., M.Sc., Ph.D., F.P.S., F.R.I.C.	September 28	No vacancies
MANCHESTER ...	The University	K. Bullock, Ph.D., M.Sc., F.P.S., F.R.I.C.	October 13	No vacancies
NOTTINGHAM ...	The University	G. E. Trease, B.Pharm., F.P.S., F.R.I.C., F.L.S.	October 9	No vacancies

(b) External degree of London University.

Centre	Institution	Head of Pharmaceutical Department	Session starts	Enrolment
BRADFORD ...	Institute of Technology	J. M. Rowson, Ph.D., M.Sc., F.P.S., F.L.S., F.R.M.S.	October 3	October 3
BRIGHTON ...	School of Pharmacy Technical College	J. C. Parkinson, B.Pharm., Ph.D., F.P.S., F.R.I.C.	September 22	No vacancies
LEICESTER ...	School of Pharmacy, College of Technology	C. Gunn, B.Pharm., F.P.S.	September 12	No vacancies
LONDON ...	Chelsea College of Science and Technology	A. H. Beckett, D.Sc., Ph.D., F.R.I.C., F.P.S.	September 26	No vacancies
SUNDERLAND ...	Technical College	F. H. Oliver, B.Sc., B.Pharm., F.P.S.	October 3	September 14

REVISION AND POST-GRADUATE COURSES

BIRKENHEAD: Technical College; Short course in pharmacology, etc. Refresher for qualified pharmacists. Special courses in spectroscopy.

BRADFORD: Technical College; The essentials of chemotherapy. The present-day practice of pharmacy.

BRIGHTON: Technical College; Ten lectures on "Radioactivity and Radiochemistry," October 7-December 9 at 6.45 p.m. Six lectures on "The Corticosteroids," September 27-November 1 at 7 p.m.

BRISTOL: College of Science and Technology; Four-year sandwich courses in applied biology and applied chemistry leading to the Diploma in Technology.

COVENTRY: Lanchester College of Technology; "Aspects of Free Radical Chemistry," December 1-2. "Developments in Organo-Metallic Chemistry," March 16-17, 1961.

DAGENHAM: South-east Essex Technical College; About six lectures on "Recent Advances in Pharmacology

and Therapeutics," commencing October 4, 7.30-9 p.m.

EDINBURGH: Heriot-Watt College; A post-diploma course of one year leading to the associateship of the Heriot Watt College in applied pharmacy for students who have taken the qualifying course at the Heriot Watt College. Subjects: choice of two from pharmaceutical analysis, pharmaceutical engineering, industrial microbiology.

GLASGOW: Royal College of Science and Technology; Post-graduate research leading to higher degrees of Glasgow University.

GLOUCESTER: Technical College; Short course in analytical chemistry, commencing December.

HULL: College of Technology; Revision course for students as required.

KINGSTON: Technical College; Twelve post-graduate lectures by specialists from research organisations and industry on "Recent Advances in Steroid Chemistry," commence September 28.

LEICESTER: College of Technology; Post-graduate Diploma course in radiochemistry. The course has been accepted by the department of Scientific and Industrial Research as suitable for the tenure of its Advanced Course Studentships. Commence October 1 or April 4, 1961.

LONDON: Chelsea College of Science and Technology (*Pharmacy Department*); Post-graduate courses for M.Pharm., M.Sc., and Ph.D. Extension lectures will also be arranged as follows:—(a) "The Economics of Pharmacy in Great Britain," from October 11; (b) "Recent Advances in Medicinal Chemistry," from October 11; (c) "Presentation and Packaging Problems in Pharmacy," January 17, 1961; (d) "Spectrophotometric Techniques in Pharmaceutical Problems," from January 17, 1961. (*Chemistry Department*); Post-graduate series of lectures in biochemistry (first and second terms only); Part-time post-graduate

course in microscopy for Food and Drugs; Post-graduate course in biochemistry in preparation for the Diploma of Chelsea College.

LONDON: Northern Polytechnic; Gas chromatography for beginners, and also for more advanced workers.

LONDON: The School of Pharmacy, University of London; Post-graduate courses for the M.Pharm., M.Sc. and Ph.D. are offered.

PRESTON: Harris College; "Radioisotope Techniques": A course of lectures and laboratory work on counting and handling techniques and uses of radioisotopes in chemical and biochemical fields. Modern methods of analysis: A two-year course covering the requirements for endorsement on the Higher National Certificate in chemistry.

SOUTHEND-ON-SEA: Municipal College; Society of Apothecaries of London—Certificate in Dispensing. Part-time course. Monday and Tuesday. Course commences September 12.

SUNDERLAND: Technical College; Radio chemistry course, evenings commencing October. "Pharmaceutics and Pharmacology for Hospital Pharmacists," commencing date to be announced later. "The Measurement of Pharmaceutical Activity"—commencing October.

WOLVERHAMPTON: College of Technology; Post-graduate and refresher courses available in spectrochemistry, radiochemistry, chromatography and recent developments in biochemistry, the chemistry of the metals and methods of analysis.

WREXHAM: Denbighshire Technical College; A Higher National Diploma sandwich course in applied chemistry. Commence September 19 (enrolment September 12-14).

Pure and Applied Chemistry

THE Ministry of Education, in Rules 100 (revised 1958) gives details of National Certificates and Diplomas available in Chemistry and Applied Chemistry. The courses of instruction for National Certificates require attendance at an approved course for at least 180 hours in each year. In chemistry there is a senior course extending over three years for students who, up to the age of sixteen, have received a full time education or alternatively have satisfactorily completed a preparatory part-time course of study. It leads to the Ordinary National Certificate in chemistry for which the student receives, in addition to training in chemistry, tuition in mathematics and physics. The advanced course extends over two years and leads to the Higher National Certificate in chemistry. Students are not admitted to the course unless they are thought to be qualified to profit by it. The courses for National Certificates in applied chemistry are subject to substantially the same regulations as apply for chemistry, with the additional subject of applied chemistry in the senior course, and a study of a selected branch of chemical technology in the advanced course. Full-time courses of two years duration and sandwich courses extending over three years lead to Higher National Diplomas in chemistry and applied

chemistry and are available for students who have been in regular employment for normally not less than two years with concurrent instruction at senior or advanced courses, or who have had full-time education up to the age of eighteen years. Successful completion of study courses for additional subjects receives acknowledgement in the form of endorsement certificates. The advanced courses achieve a standard equivalent to a University pass degree and, though they are considered as an end in themselves, are suitable for students desirous of becoming fully qualified technologists.

Photographics

THE examinations of the Photographic Dealers' Associations have for their object the raising of the standard of efficiency of assistants, both in practical photography and salesmanship as applied to the business of the photographic dealer. The examinations, which can be taken by retail photographic dealers and assistants, will comprise intermediate and advanced grades. In the intermediate examinations, candidates will be required to give written and oral answers to the questions set on such subjects as simple cameras, accessories, sensitised materials, chemicals, etc. All successful candidates in the intermediate examination receive a certificate. In the advanced examination, which is divided into two parts, Part I, general, and Part II, cine, candidates obtain a diploma for passing either part. In addition, two travelling scholarships are offered each year to outstanding candidates. That examination is open only to those who have passed the intermediate, and comprehensive knowledge must be shown in the following subjects:—General—miniature cameras, processing, enlarging, colour and cine photography, etc., to a more advanced standard; cine—principles of amateur cinematography, sensitometry, films and processing, exposure, cameras and projectors, etc.

The examinations which consist of three parts, written, oral and practical, are restricted to those engaged in retail photographic dealing, and the examination is designed, in each of its three parts, to test the merit of candidates from the standpoint of retail photography. The written paper calls for a sufficient standard of knowledge for the candidate to be able to give satisfactory and reliable technical advice to a customer. The practical test is primarily one of the technical ability in using everyday photographic materials correctly. The oral examination provides the opportunity for the candidate to demonstrate his abilities as a photographic dealer's assistant.

Holders of the P.D.A. diploma become automatically eligible for associate membership of the Association on application, and if and when they open an approved retail shop, are automatically entitled to full membership of the P.D.A.

The examinations take place in London, Manchester, Dublin and a suitable centre in Scotland. The entrance fees are:—Intermediate examinations, £2 2s.; advanced examination, £3 3s.

Details may be obtained from the

general secretary of the Association, 46 Bloomsbury Street, London, W.C.1.

Chiropody

To gain admission to the National Register of Medical Auxiliary Services, it is necessary to pass the examination of the Society of Chiropodists, 8 Wimpole Street, London, W.1. The pass certificate of the Society is also accepted by the Ministry of Health and the Department of Health for Scotland as qualifying for employment as a chiropodist in the National Health Service.

Optics

THERE are four examining bodies concerned with the career of ophthalmic opticians: The Worshipful Company of Spectacle Makers, the British Optical Association, the Scottish Association of Opticians, and the Institute of Optical Science. The qualifying course lasts three years at an approved college plus one year's clinical practice. Entrants to the course must hold two subjects at advanced level and three at ordinary level, G.C.E. Further details from the Association of Optical Practitioners, 65 Brook Street, London, W.1.

Medicine

THE registration body for medical practitioners in the United Kingdom is the General Medical Council, 44 Hallam Street, London, W.1. There are a number of examining bodies, and when a student has passed the final examination of one of these bodies he is entitled to provisional registration as a medical practitioner. In order to obtain full registration he must thereafter render satisfactory service for twelve months in appropriate resident appointments in approved hospitals or institutions. Study for a medical qualification occupies a minimum of five academic years after passing a recognised examination in general education and in chemistry, physics and biology.

Dentistry

THE practice of dentistry is restricted by Act of Parliament to persons registered in the dentists register or under the Medical Acts, but the provision of general dental services under the National Health Service Acts is confined to persons included in the dentists register. Possession of a degree or licence in dental surgery granted by a university or other licensing corporation in Great Britain or Ireland carries with it the right to be included in the dentists register kept by the General Dental Council, 37 Wimpole Street, London, W.1. Degrees and licences in dental surgery are granted by Bristol, Durham, Leeds, Liverpool, Manchester and Sheffield Universities and by Queen's University, Belfast. Degrees only are granted by Birmingham, London, Edinburgh, Glasgow, and St. Andrews Universities and by the National University of Ireland and by Dublin University.

The course usually extends over five years (including one year devoted to chemistry, physics and biology).

Registration in the Republic of Ireland is in the hands of the Dental Board, whose address is 57 Merrion Square, Dublin.

TRADE REPORT

The prices given are those obtained by importers or manufacturers for bulk quantities or original packages. Various charges have to be added whereby values are in many instances augmented before wholesale dealers receive the goods into stock. Crude drugs and essential oils vary greatly in quality and higher prices are charged for selected qualities.

LONDON, JULY 13: The main feature of the CRUDE DRUGS market was again provided by firmness of both AGAR and MENTHOL, the dearer tendency noted in the previous week continuing.

In the case of agar spot holders were willing to sell at less than replacement values, the figure quoted being 14s. 6d. per lb., in bond, against 15s., c.i.f. (representing a rise of sevenpence-halfpenny and 1s. 2d. per lb. respectively). Only a very small quantity of Chinese menthol now remains on offer on the spot, the duty paid value being 10s. up at 80s. per lb. Brazilian material was 2s. per lb. dearer following a 1s. 6d. per lb. rise at origin. African GINGER was 5s. per cwt. dearer on the spot but Cochinchina eased by a similar amount. Whilst SENEGA was unchanged there seemed to be no offers for early shipment from Canada. Para TONQUIN BEANS were being quoted at around 7s. 6d. to 7s. 9d. per lb.

Dearer per lb. among ESSENTIAL OILS were Madagascar CLOVE LEAF at 8s. 6d. (up sixpence) and CASSIA at 16s. nominal, with supplies of the latter short. Lower per lb. were Chinese PEPPERMINT at 36s. (down one shilling) and PATCHOULI at 40s. (down 2s. 6d.). Ceylon CITRONELLA eased again by threepence to 6s. 6d. but Formosan was about threepence dearer in both positions.

In PHARMACEUTICAL CHEMICALS, THEOPHYLLINE was reduced by 1s. 6d. per kilo; AMINOPHYLLINE at 31s. 6d. per kilo for 50-kilo lots was also down 1s. 6d.

Pharmaceutical Chemicals

ACETIC ACID.—B.P. glacial, 10-ton lots, £112 per ton naked; technical (80 per cent.) £97. Carboys are £8 and demijohns, £10 per ton extra. Single carboy lots 1s. 8d. per lb. (3s. 8d. per kilo).

ALUM.—Micro-crystalline, 14-lb. lots, 31s. 6d. per lb.

ANTIMONY SALTS.—CHLORIDE SOL., B.P.C., 1934, carboys, 2s. 6½d. lb.; OXIDE, B.P.C., 3s. lb. One-cwt. lots. POTASSIUM TARTRATE, 7s. 6d. per lb.; SODIUM TARTRATE, 12s. 6d.

ASPIRIN.—5-cwt. lots (in kegs), 4s. 9d. per lb.; 1-cwt., 4s. 11d. CALCIUM SALT, 12s. 6d. per lb.

ATROPINE.—Rates for 16-oz. (500 gm.):

	per oz.	per kilo
	s. d.	s. d.
ALKALOID	39 0	1375 0
METHONITRATE ..	39 0	1375 0
METHYLBROMIDE ..	38 6	1357 0
SULPHATE	34 0	1198 6

BARIUM SULPHATE.—B.P., 250-lb. lots, 3s. 3½d. per kilo.

CAFFEINE.—ANHYDROUS, less than 50-kilo lots, 35s. per kilo; MONOHYDRATE, B.P., 34s.; CITRATE, 26s. kilo.

CHLORAL HYDRATE.—One-cwt. lots, 4s. 6d. per lb.

CHLORIBUTOL.—28-lb. lots, 10s. per lb.

CINCHOPHEN.—One-cwt. lots 21s. per lb.

CITRATES.—Per lb.:

	1 cwt.	5 cwt.
	s. d.	s. d.
SODIUM†	2 8½	2 7½
POTASSIUM†	2 11½	2 10
IRON AND AMMONIUM* ..	3 7½	3 6

†Powder 3d. per lb. more. *Scales 10d. per lb. more.

CREOSOTE.—B.P. quality, ex beechwood, from 6s. 9d. to 7s. 6d. per lb.

CRESOL.—B.P. quality, 7s. 9d. per gall. in 5-gall. lots.

CYCLOBARBITONE.—Less than 25 kilos: B.P.C., 73s. per kilo. CALCIUM, 85s.

DEXTRIOSE.—In bulk, MONOHYDRATE, £76 per ton, delivered; ANHYDROUS, £115 per ton.

DICOPHANE (DDT).—One-cwt. lots 3s. 2d. per lb.; 5-cwt., 3s. 0½d.; 1-ton, 2s. 11d.

DIPHENAN.—(Per lb.). 55s. 3d. (56-lb.) to 63s. (1-lb.)

EMETINE.—One-kilo lots, HYDROCHLORIDE, 8,642s. per kilo.

EPHEDRINE.—ALKALOID nominally 6s. 6d. per oz., SULPHATE, 4s. and HYDROCHLORIDE, 3s. 3d. per oz.

ERGOMETRINE.—MALEATE, B.P., 270s. per gm.

ERGOTOXINE ETHANESULPHONATE.—B.P.C. (1949); 1 gm., 168s. 9d.; 10 gm., 155s. 3d., per gm.

FORMALDEHYDE.—B.P. solution, 5 drum lots, 60s. per cwt.

GALLIC ACID.—B.P., 10s. 7d. per lb. for 1-cwt. lots. Technical grade, 9s. 9d.

GLYCEROPHOSPHATES.—Per lb. in 1-cwt. lots:—ACID, B.P.C., 20 per cent., 4s. 7d.; CALCIUM, soluble, B.P.C., 12s.; IRON, B.P.C., scale, 15s. 9d. and powder, 14s. 9d.; MAGNESIUM, soluble B.P.C., 14s. 3d.; MANGANESE, B.P.C., 27s.; POTASSIUM, 50 per cent., B.P.C., 3s. 9d. and 75 per cent., B.P.C., 5s. 6d.; SODIUM, 50 per cent., 2s. 7d.; 75 per cent., 4s. 6d.; 100 per cent., 8s.

HYDROGEN PEROXIDE.—27.5 per cent. (by weight), £115 per ton; 35 per cent. £138 in returnable carboys.

HYPOPHOSPHITES.—Per lb.:

	7 lb.	28 lb.	1 cwt.
	s. d.	s. d.	s. d.
CALCIUM, B.P.C. ..	6 9	6 4	5 11
IRON, B.P.C. ..	13 9	13 3	12 9
MAGNESIUM ..	11 6	11 1	10 8
MANGANESE, B.P.C. ..	13 11	13 5	12 11
POTASSIUM, B.P.C. ..	9 3	8 10	8 5
SODIUM, B.P.C. ..	7 7	7 2	6 9

IRON SALTS.—GLUCONATE, B.P.C., 6s. 3d. per lb. in 1-cwt. lots; SULPHATE, B.P., crystals, 9½d. per lb. in 28-lb. lots; 1-cwt., 57s. 6d. per cwt., 5-cwt., 52s. 6d. per cwt.; SULPHATE EXSICCATED, 1s. 5d. per lb. for 28-lb., 1-cwt. 123s.; 5-cwt., 113s. per cwt., 1-cwt. fibre kegs free. Other packages extra. PHOSPHATE, B.P.C., 28-lb., 3s. 6d. per lb.; 1-cwt., 3s. 3d. PHOSPHATE, SACCHARATED, B.P.C., 28-lb. lots are 3s. 9d. per lb.; 1-cwt. 3s. 6d. OXIDE RED PRECIPITATED, B.P.C., 1949, 1-cwt. 2s. 1d. per lb.; CARBONATE, SACCHARATED, B.P.C., 1949, 28-lb., 3s. 3d.; 1-cwt., 3s. AMMONIUM CITRATE, scales 3s. 6d. per lb. (5-cwt. lots). AMMONIUM SULPHATE, 1-cwt., 1s. 10d. per lb. QUININE CITRATE, 2s. 1d. per oz. in 100-oz. tin.

ISOPRENALINE SULPHATE.—(Per gm.) 100-gm. lots, 1s. 6d.; 500-gm. 1s.; 1-kilo, 9d.

KAOLIN.—LIGHT, 60s. per cwt.; 1-ton 57s. per cwt.

LACTATES.—CALCIUM, B.P., 2s. 3d. per lb. in 5-cwt. lots and 2s. 4d. in 1-cwt. lots; CALCIUM SODIUM, 4s. 9d. and 4s. 10d. per lb.

LACTIC ACID.—B.P. 4s. 5d. per lb. for 12-winchester lots and 4s. 4d. for 5-cwt. lots. Edible, 80 per cent. acid,

2s. 4d. per lb. for under 1-ton lots; 12 winchesters, 2s. 8d. per lb.

METHOIN.—B.P., 120s. per lb.

METHYL PHENOBARBITONE.—B.P.C., 95s. per kilo for less than 25-kilo lots.

OLEIC ACID.—B.P. grade, £170 10s. per ton (£174 10s. single drum lots); 1 gall. tins 21s. per gall.

OXALIC ACID.—Manufacturers' rates for 1-ton lots, £128 10s. per ton, delivered in free kegs.

PARACETAMOL.—Minimum 10-cwt., 10s., per lb.; 56-lb., 10s. 3d.

PARALDEHYDE.—B.P. in 12-winchester lots, 2s. 10d. per lb. (6s. 3d. kilo); 10-gall. carboys, 2s. 4d.

PHENOL.—Ice crystals in drums is 1s. 4½d. per lb. (under 1-ton lots, 1s. 7½d.). Detached crystals, 2d. per lb. above and LIQUID, B.P., ¼d. per lb. below the foregoing prices.

PHENYTOIN SODIUM.—One-cwt. lots 23s. per lb.; less than 56-lb., 25s.

PHOSPHORIC ACIDS.—B.P. (s.g. 1.750) is from 7s. 5d. to 8s. 6d. per lb. as to quantity. B.P. 1914, 1s. 2d. to 1s. 6d. per lb. HYPOPHOSPHORUS, B.P.C., in winchesters is from 7s. 5d. to 8s. 6d. per lb., as to quantity; drums, 7s. per lb.; 50 per cent. acid, drums, 8s. 9d.

PHYSOSTIGMINE.—Per gm.: ALKALOID, 14s. 8d. (5-gm. lots); SALICYLATE, 10s. and SULPHATE, 12s. 7d. (25-gm. lots); NITRATE, 1s. 1½d. (500-gm.).

PILOCARPINE.—In 2-kilo lots prices are: HYDROCHLORIDE, 1,013s. per kilo; NITRATE, 825s.

PIPERAZINE.—(50-kilo lots), ADIPATE, 26s. per kilo; CITRATE, 25s.; HEXAHYDRATE, 24s. and PHOSPHATE, 30s.

QUININE.—1,000-oz. lots:—ALKALOID, 3s. per oz.; SULPHATE, B.P., 1932, 1s. 11½d.; SULPHATE, B.P., 1958, 2s. 2½d.; BISULPHATE, 2s.; DIHYDROCHLORIDE, 2s. 9d.; HYDROCHLORIDE, 2s. 6½d.; ETHYL CARBONATE, 4s. 3d.; HYDROBROMIDE, 2s. 5d. Quantities under 100 oz. plus threepence.

ROCHELLE SALT.—Powder or granulated, 5-cwt. lots or over in kegs, 220s. per cwt.; 1-cwt. 222s. 6d. (bags less 5s.).

SALICYLIC ACID.—One-cwt., 3s. 2½d. per lb.; 5-cwt., 3s. 0½d. per lb.

SANTONIN.—5-kilo lots, 400s. per kilo (11s. 4d. per oz.).

TEREBENE.—One-carboy lots, 4s. 5d. per lb.

TERPIN HYDRATE.—From 6s. per lb. upwards as to quantity.

TERPINEOL.—B.P. from 3s. to 3s. 6d. per lb. as to quantity.

THEOBROMINE.—ALKALOID in 50-kilos, 77s. per kilo.

THEOPHYLLINE.—50-kilo lots: ALKALOID ANHYDROUS, 33s. per kilo and B.P., 31s. 9d. and 12½ kilos, 32s. 6d.; AMINOPHYLLINE, 31s. 6d. per kilo; 12½ kilos, 32s. 6d. per kilo.

THIOUREA.—Technical grade, 1-cwt. lots, 3s. 1½d. per lb.; 10 cwt., 2s. 9½d. per lb.

THYMOL.—One-cwt. lots, 14s. 3d. per lb.

ZINC CARBONATE.—One-cwt. lots, 1s. 11d. per lb.

ZINC CHLORIDE.—B.P.C. cake, 5s. per lb.; sticks, 6s. 10d. TECHNICAL, 115s. per cwt.

ZINC OXIDE.—B.P. in 2-ton lots, £115 per ton.

ZINC PEROXIDE.—One-cwt. lots of B.P., 5s. 3d. per lb.

ZINC SULPHATE.—B.P., 1-cwt. lots, 1s. 10d. per lb.

Crude Drugs

ACONITE. — Spot: Spanish *napellus*, 2s. 6d. per lb.

AGAR. — Kobe No. 1, 14s. 6d. per lb. in bond; shipment, 15s., c.i.f.

ALOE. — Cape primes, spot, 200s. per cwt. quoted; shipment, 180s., c.i.f., nominal. Curaçao, 500s., spot.

BALSAMS. — Per lb.: CANADA: Spot, 22s. for paper-filtered. COPAIBA: Para scarce on the spot, small lots at 7s. 9d., duty paid. PERU: Spot, 9s. 9d. in bond. TOLU (genuine as imported): small parcel on spot at 24s. per lb.; B.P., 13s. 3d.

BELLADONNA. — LEAVES (t.a. 0.6 per cent.), 2s. 9d. per lb. Dutch for shipment, 2s., c.i.f. Root cleared on the spot.

BENZON. — Sumatra block, spot £22 to £30 as to quality.

BUCHU. — Spot rounds, 3s. 6d. per lb., shipment, 3s. 1d., c.i.f.

CALABAR BEANS. — Spot, 2s. 3d. per lb.

CALAMUS. — Root, 1s. 2d. per lb., c.i.f.

CALUMBA. — Root, 100s. per cwt., spot; 87s. 6d., c.i.f.

CAMPHOR. — B.P. powder, 3s. 7½d. per lb. in bond.

CAPRICUMS. — Chinese 155s., duty paid.

CARDAMOMS. — Aleppy greens, spot, 15s. 3d. per lb.; prompt shipment, 14s. 6d., c.i.f. Seeds, shipment, 21s. 3d., c.i.f.

CASCARA. — Spot, 295s., per cwt.; prompt shipment, 275s., c.i.f.: 1960 peel, July–August, 237s. 6d., c.i.f.

CASSIA. — *Fistula*, 115s. per cwt., spot; *lignea*, 380s., duty paid.

CHERRY BARK. — Thin natural, 1s. 6½d. per lb.; rossed, 1s. 11d.

CINNAMON QUILLS. — Shipment (c.i.f., per lb.) 4 O's, 5s. 9½d.; 3 O's, 5s. 4½d.; O, 5s. 0½d.; quillings, 3s. 3½d.; featherings, 1s. 7½d.

CLOVES. — Zanzibar spot, 2s. 9d. per lb.; shipment, 2s. 5½d., c.i.f.

COCHINEAL. — Black-brilliant, 12s. 9d. per lb., spot; Peruvian silver-grey, 4s. 6d.

COCILLANA. — Bark, 2s. per lb., spot.

COLOCYNTH PULP. — Spot, 2s. to 2s. 6d. per lb. as to quality.

DIGITALIS. — *Purpurea* for shipment, 1s. 2½d. to 2s. 7d. per lb., c.i.f., as to test.

ELEMI. — Spot, 2s. 6d. per lb. nominal. Shipment, not offering.

ERGOT. — Portuguese, 5s. per lb., c.i.f.: spot, 5s. 6d. East European not offering.

FRANGULA. — Spot, 105s. per cwt.

GENTIAN. — Spot: French, 155s. per cwt.

GINGER. — African, spot, 175s. and 165s., c.i.f. Jamaican No. 3, spot, 210s.; shipment, 195s., c.i.f. Cochin, shipment, new crop, 170s., c.i.f.; spot, 170s. (per cwt.).

GUM ACACIA. — Kordofan cleaned sorts, 170s. per cwt., spot; July–August shipment, 162s., c.i.f.

HENNA. — Indian, spot, 90s. per cwt.

HONEY. — Australian light amber, 95s. to 97s. 6d. per cwt. and medium amber 90s. to 95s.; Argentine, 100s. to 102s. 6d.; Jamaican, 115s. to 120s.; Canadian clover, 145s. to 150s., all ex warehouse.

IPECACUANHA. — Matto Grosso 52s. 6d. per lb., c.i.f. Colombian, 53s. 6d., c.i.f. Costa Rican, 71s. 6d., c.i.f. Spot: Matto Grosso, 55s.; Colombian, 56s.

JUNIPER BERRIES. — Italian, 90s. per cwt., spot.

KARAYA. — No. 1 gum, spot 325s. per cwt. nominal; No. 2, 225s.

KOLA NUTS. — Jamaican for shipment, 7d. per lb., c.i.f. African, 5½d. spot and 4d., c.i.f.

LANOLIN. — ANHYDROUS, B.P., is from 170s. to 175s. per cwt. in 1-ton lots and HYDROUS, B.P., 150s., free drums, delivered.

MACE. — Whole pale blade, 24s. per lb. spot; 22s., f.o.b.

MENTHOL. — Chinese, 80s. per lb., duty paid; shipment not offering. Brazilian, 57s., in bond; 56s. 6d., c.i.f.

NUTMEGS. — West Indian 80's 12s. per lb., spot; sound unassorted, 9s. 6d.; defectives, 7s. 8d.

NUX VOMICA. — Spot, 125s., cwt.; shipment, 105s., c.i.f.

ORRIS ROOT. — Florentine, 350s. per cwt.

PAPAIN. — Tanganyikan, 14s. per lb., c.i.f., for grade one, spot, 15s. Ceylon, No. 1 white, 13s. 6d., c.i.f.: brown, 10s., c.i.f.

PEPPER. — White Sarawak spot, 5s. 10d. per lb.; shipment, 5s. 9d., c.i.f. Black Sarawak, 4s. 10d. spot and 4s. 6d., c.i.f. Black Malabar, 460s. to 525s. per cwt. spot; 560s., c.i.f.

PEPPERMINT LEAVES. — Dutch whole, 1s. 11d. to 2s. 7d. per lb., c.i.f.

PODOPHYLLUM. — *Emodi*, 200s. per cwt. spot, and 185s., c.i.f., for shipment, *Peltatum*, spot value, 375s.

PYRETHRUM. — Extract, minimum, 25 per cent. w/w pyrethrins, 75s. per lb. for small lots.

QUASSIA. — Spot, 55s. per cwt., ex wharf.

RHUBARB. — Chinese small round from 5s. 9d. to 6s. 9d. per lb. on the spot.

SAFFRON. — *Mancha selecta*, 147s. 6d. per lb.

SARSAPARILLA. — Jamaican native red on spot, 2s. 5d. per lb.; shipment, 2s. 1d., c.i.f.

SENEGAL. — Spot, 18s. 6d. per lb.

SENNA. — *Tinnevely* LEAVES, prime No. 1, 1s. 5d. per lb., f.a.q.; No. 3, 9d. PODS: Manufacturing (f.a.q.), 9d. and hand-picked, 1s. 6d. to 1s. 10d. *Alexandria* pods: Manufacturing, 1s. 6d.; new crop hand-picked, 5s. to 6s.

SQUILL. — White 85s. per cwt., spot.

STRAMONIUM. — Indian LEAVES 60s. per cwt., spot. Dutch 0.5 per cent. alkaloid 93s., c.i.f.

STYRAX. — Spot, 33s. per lb., shipment, 31s., c.i.f.

SEEDS. — (Per cwt.) ANISE. — Spanish, 160s., duty paid. CARAWAY. — Dutch, 175s., duty paid. CELERY. — Indian, 137s. 6d., spot; shipment, 119s., c.i.f. CORIANDER. — Moroccan firmer, 57s. 6d. now quoted, duty paid; shipment (new crop) advanced to 54s. 9d., c.i.f. CUMIN. — Indian, 210s., spot; Iranian, 230s., duty paid; shipment, Indian, 182s. 6d., c.i.f. DILL. — Indian unchanged at 95s., spot; shipment firm at 87s. 6d., c.i.f. FENNEL. — Chinese, 95s., duty paid; Indian, 120s. FENUGREEK. — Moroccan, 50s. to 52s. 6d., duty paid; shipment, 43s. 3d., c.i.f., quoted. MUSTARD. — English, 94s. to 105s., according to quality.

TONQUIN BEANS. — Para spot, 7s. 6d. to 7s. 9d. per lb. Shipment about 7s., c.i.f. Angostura 11s.

TRAGACANTH. — No. 1 ribbon, £135 to £140 per cwt. No. 2, £125 to £130.

TURMERIC. — Madras finger on spot is 105s. per cwt.; new crop, prompt shipment, 97s. 6d., c.i.f., quoted.

VALERIAN ROOT. — Spot: Indian (with rootlets), 130s. and Belgian, 175s. per cwt. Dutch whole (max. 2½ per cent. sand) for prompt shipment, 173s., c.i.f.

VANILLIN. — Rates (per lb.) are now: — 5-cwt. lots, 23s. 3d.; 1-cwt., 23s. 6d.; 56-lb., 23s. 9d.; smaller quantities, 24s.

WAXES. — (Per cwt.) BEES'. — Dar-es-Salaam, spot, 485s.; shipment, 478s., c.i.f. Abyssinian, spot 410s. in bond; shipment, 370s., c.i.f. Benguela, shipment, 380s., c.i.f. Sudanese, spot, 430s.; shipment, 375s., c.i.f. CANDELILLA, spot, 470s. CARNAUBA, fatty grey, spot, 565s.; shipment, 565s., c.i.f.; prime yellow, spot, 790s.; shipment, 760s., c.i.f.

Essential and Expressed Oils

BAY. — West Indian, 12s. 6d. per lb. on the spot.

BERGAMOT. — Spot, from 72s. 6d. per lb.

BOIS DE ROSE. — Brazilian, 15s. 3d. per lb. on the spot and 14s. 9d., c.i.f.

CADE. — Spanish, 3s. 6d. per lb. for drum lots.

CAJUPUT. — Spot from 9s. per lb.

CALAMUS. — Spot, 56s. 6d. per lb.

CAMPHOR, WHITE. — Chinese, 1s. 8d. per lb. in bond.

CANANGA. — Spot, from 38s. to 46s. 6d. per lb.

CARAWAY. — Imported oil, 26s. 6d. to 37s. 6d. per lb.

CARDAMOM. — From 330s. per lb. for English-distilled and 260s. for imported.

CASSIA. — Spot, 16s. nominal per lb.; shipment not offering.

CASTOR. — Home-produced B.P. oil, spot, £158 per ton naked ex mill (2-ton lots).

CEDARWOOD. — American rectified, 6s. 6d. per lb. on the spot.

CELERY SEED. — Dutch oil, 90s. per lb. and Chinese, 65s.

CHENOPodium. — Spot value, 36s. per lb. for original containers.

CITRONELLA. — Ceylon, spot, 6s. 6d.; shipment, 6s. 1½d. per lb., c.i.f. Formosan, spot, 6s. 1d., in bond; shipment, 5s. 11d., c.i.f.

CLOVE. — Madagascar leaf, spot, 8s. 6d. per lb., duty paid; shipment, 7s. 2d., c.i.f. Rectified 87–88 per cent., 12s. Distilled bud-oil, English, B.P., 30s. to 31s.

EUCALYPTUS. — Australian 70 and 75 per cent. eucalyptol on the spot is 3s. 6d. per lb. 80–85 per cent., 4s. Spanish (70–75), 3s. 6d. spot. Chinese 3s. to 3s. 6d., duty paid.

FENNEL. — Spanish sweet, spot, 10s. per lb.

GERANIUM. — Bourbon, 185s. to 200s. per lb. on the spot.

GINGER. — Imported: Jamaican, 130s. per lb.; Chinese, 72s. 6d., duty paid.

GINGERGRASS. — Spot 27s. 6d. per lb.

GRAPEFRUIT. — Jamaican, 15s. per lb. spot. Florida, 17s. spot.

JUNIPER. — B.P.C. 1949 oil is from 12s. 6d. per lb. on the spot. English-distilled, 180s. JUNIPER WOOD, from 5s.

LAVANDIN. — Spot, 6s. to 9s. per lb. for original drums.

LAVERDER. — From 24s. to 37s. 6d. per lb. as to quality.

LAVERDER SPIKE. — Spanish, 13s. 9d. per lb. for original drums.

LEMON. — B.P. grades from 16s. per lb., spot; Sicilian, 25s. 6d. Terpeneless, 500s. per lb.

LEMONGRASS. — Spot, 12s. 3d. per lb., and shipment, July–August, 12s.

PATCHOULI. — Penang is 40s. duty paid and 36s. 6d., c.i.f., per lb.

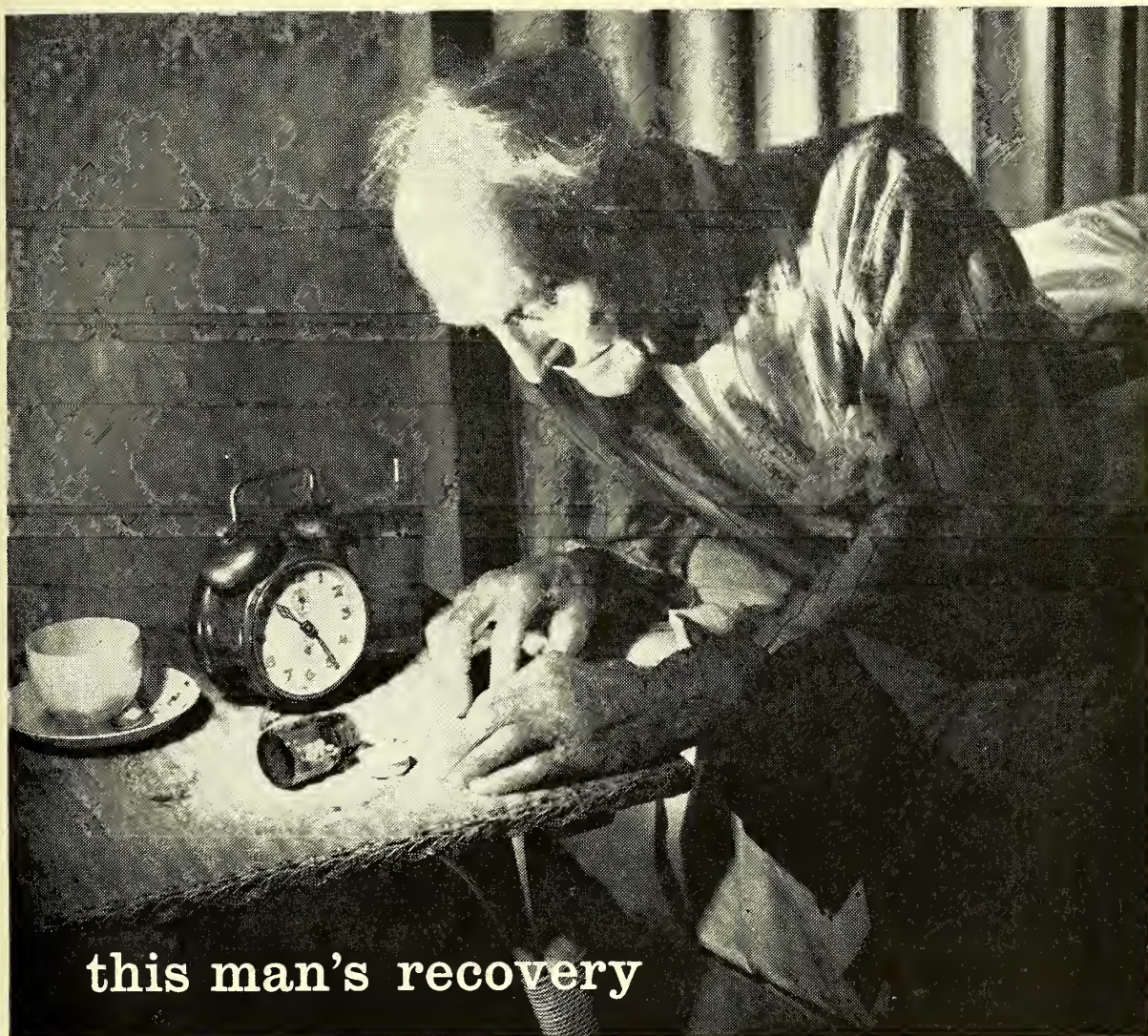
PEPPERMINT. — *Arvensis*: Chinese spot, 36s. per lb. Brazilian, 16s. spot and shipment, 16s., c.i.f. *Piperita*: Italian "Mitcham-type" from 42s. 6d. to 48s. 6d.; American, 25s. to 30s., as to origin.

ROSEMARY. — Spanish is 7s. 6d. per lb. on the spot for best quality.

SPEARMINT. — American oil from 67s. 6d. to 70s. per lb. Chinese, 45s., c.i.f.

UNITED STATES REPORT

NEW YORK, JULY 12: A short supply situation in some BOTANICALS was attributed to slow gatherings of the crops. Trading has slowed down considerably and price movements were limited. Better demand from consumers put Formosan CITRONELLA OIL up to 84 cents per lb. and possibly higher.



this man's recovery

may depend on the safety of 'Distaval'

How easy it is for the elderly, confused patient to ignore "the instructions on the bottle". And if the bottle contains a barbiturate—the patient may well be numbered among the growing volume of accidental poisonings recorded in this country each year. As a safeguard, more and more doctors are prescribing the sedative and hypnotic which is both highly effective and outstandingly *safe*. Its name—'Distaval'. Its special merit—side effects are uncommon, even when taken in gross overdose.

As a hypnotic at bedtime.
ADULTS: 50mg.—200mg.
INFANTS AND CHILDREN:
25mg.—100mg.

As a daytime sedative.
ADULTS: 25mg. two to three times daily.
INFANTS AND CHILDREN:
Half to one 25mg. tablet, according to age, one to three times daily.

'Distaval' (25mg. tablets),
'Distaval' Forte (100mg. tablets).

'DISTAVAL'

THALIDOMIDE

TRADE MARK

REFERENCES
Practitioner, 1959, 183, 57.
J. clin. exp. Psychopath, 1959,
20 243.
J. Coll. gen. Pract., 1958, 1, 398.
Brit. Med. J., 1959, 2, 635.
Med. Wld. (Lond.), 1960, 93, 26.



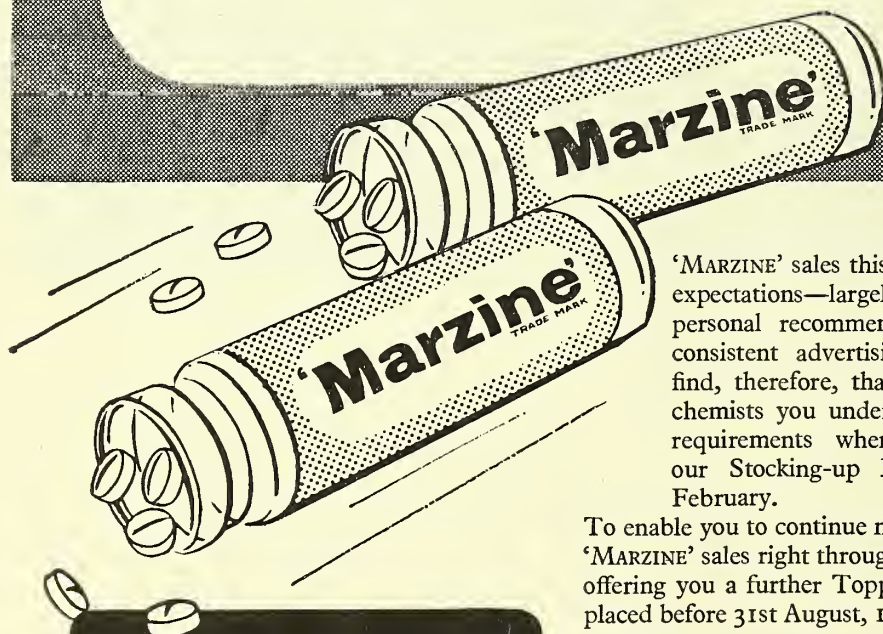
THE DISTILLERS COMPANY (Biochemicals) LIMITED
Broadway House, The Broadway, Wimbledon, London, S.W.19 Telephone: LIBerty 6600
Owners of the trade mark 'Distaval'



'Marzine'

TRADE MARK

offers a special
Topping-up Bonus
to help your travel season sales



'MARZINE' sales this season are exceeding all expectations—largely as a result of increasing personal recommendations, backed up by consistent advertising. You will probably find, therefore, that like many other retail chemists you under-estimated your season's requirements when taking advantage of our Stocking-up Bonus in January and February.

To enable you to continue making the extra profit on 'MARZINE' sales right through the season, we are now offering you a further Topping-up Bonus on orders placed before 31st August, 1960.

Remember 'Marzine'
*is still being
 strongly advertised*

ON 6 DOZEN TUBES OR MORE
 14 to the dozen, i.e. 2 bonus tubes with every dozen

Please check your stock now and let us know your requirements. (4 dozen 'MARZINE', which will be supplied at 13 to the dozen, will be carriage paid.)



A=Advanced; R=Reduced. ENTRIES NEW THIS WEEK ARE MARKED THUS ●

2-Minute Magic (385 DG)		57	0	28	6	9	6	Ayrton (78 AS&Co) tablets						
Achromycin (746 Lederle)									iron, vitamin and yeast (Ivy)	16	0	..	..	2 0
capsules 50 mgm ..		25	10	10ea	..	16	3 TS		face cloths "Smart Set" 301	18	0	..	..	2 6
		100	40	6ea	..	60	9 TS		hot water bottle The Ergosy	52	0	..	..	6 6
250 mgm ..		16	29	0ea	..	43	6 TS	<i>Delete</i>	scissors toe nail Edgware	..	..	..	..	..
		100	174	2ea	..	261	3 TS	<i>Delete</i>	..	401	..	..	..	..
		1000	1682	4ea	..	2523	6 TS	<i>Delete</i>	tower display ..	..	..	..	..	..
for ear solution									Barnet (617 Holloway)					
vial powder .. 50 mgm }		6	10ea	..	10	3 TS			ladies brush sets Duette A11	61	4	15	4	8 11
vial diluent .. 10 cc }									A13	86	4	25	2	12 11
intramuscular vial									A14	109	0	27	3	15 11
100 mgm ..		5	2ea	..	7	9 TS			A15	128	0	35	0	18 11
intravenous vial 100 mgm ..		4	8ea	..	7	0 TS		<i>Delete</i>	A16, A17	..	..	..	..	..
250 mgm ..		9	8ea	..	14	6 TS			Annette A29	61	4	15	4	8 11
500 mgm ..		17	6ea	..	26	3 TS			A30	102	0	25	6	14 11
ointment 3% 30 gm ½ oz ..		4	6ea	..	6	9 TS			Juliette A31	64	8	16	2	9 6
1 oz		8	2ea	..	12	3 TS			A32	109	0	27	3	15 11
ointment ophthalmic 1%									Colette A33	40	6	10	1½	5 11
10 mgm 6 x ½ oz tubes		6	10ea	..	10	3 TS			babies brush sets	A27	26	10	6	8½ 3 11
ophthalmic powder									A28	33	8	8	5	4 11
sterilised vial ..		5	6ea	..	8	3 TS			A35	32	8	8	2	4 11
for oral suspension									gents brush sets	..	..	..	..	..
1-5 gm .. 1 oz		10	10ea	..	16	3 TS			Bartex (477 AF&B)					
ophthalmic oil suspen-									superlens clipovers	..	..	..	..	7 6
sion 1% 10 gm/cc									superlens sunglasses	..	..	..	..	7 11
dropper .. 6 cc		1	10ea	..	2	9 TS								12 9
pediatric drops .. 10 cc		7	4ea	..	11	0 TS								15 11
soluble tablets .. 100		40	6ea	..	60	9 TS			Becosed (901 Norton)					
syrup .. 2 oz		10	10ea	..	16	3 TS			elixir ..	16 oz	96	0	..	..
		16 oz	78	0ea	..	117	0 TS			80 oz	348	0	..	..
tablets 50 mgm .. 25		10	10ea	..	16	3 TS			Bedeman (102 CB)					
		100	40	6ea	..	60	9 TS		lemon cream shampoo	21	9	5	5½	1 0
250 mgm .. 16		29	0ea	..	43	6 TS				3 doz		3 doz		
		100	174	2ea	..	261	3 TS		Biotta (612 Hobson)					
		1000	1682	4ea	..	2523	6 TS		vegetable juice					
troches 15 mgm .. 25		4	2ea	..	6	3 TS			carrot, beetroot, tomato	85	6	..	..	9 6
Achromycin V (746 Lederle)									celery	89	3	..	..	9 11
capsules 250 mgm .. 16		29	0ea	..	43	6 TS			Bisodol (655 ICC) powder	30	3	7	7	4 0
		100	174	2ea	..	261	3 TS		tablets	30	15	2	3 10	2 0
		1000	1682	4ea	..	2523	6 TS			100	36	0	9 0	4 9
50 mgm .. 25		10	10ea	..	16	3 TS			Breck (1169 GS & S)					
		100	40	6ea	..	60	9 TS		hair set mist aerosol	5½ oz	75	0	37	6
pediatric drops .. 10 cc		7	4ea	..	11	0 TS				16 oz	126	0	63	0
syrup .. 2 oz		10	10ea	..	16	3 TS			Elimin shampoo	4 oz	41	0	10	3
		16 oz	78	0ea	..	117	0 TS		Broxil (1393 BRL)					5 11
Adcortyl-A (1176 Squibb)									syrup	60 mls	222	0	..	18 6 TS
spray .. 50 gm		10	4ea	..	15	6 TS			tablets 125 mgm	24	192	0	..	24 0 TS
									250 mgm	24	352	0	..	44 0 TS
Alfonal (29 Alfonso)								<i>Delete</i>	125 mgm	12	..	..	..	..
corn oil .. ½ gall		12	0ea	..	15	0		<i>Delete</i>	250 mgm	12	..	..	..	..
sunflower seed oil .. ½ gall		18	9ea	..	25	0								
<i>Delete</i> Altex (339 CG) sanitary towels									Buto (128 Biometica)					
D17									hair remover	..	13	6	6	9
D16									Calci-pen-V (147 Boots)					2 3
Ambramycin (70 Aspro)									125 mgm	60 mls	106	0	..	13 3 TS
capsules 250 mgm .. 16		29	0ea	..	..	TS			Cambison (614 Hoechst) ointment					
		60	104	6ea	..	TS			(distributors 621 Horlicks)					
		250	423	4ea	..	TS			0-25% ..	5 gm	40	0	9	9
oral suspension 2.5% 60 mls		10	10ea	..	..	TS				20 gm	128	0	31	2
Amphedrex (195 Brook Parker)										5 gm	64	0	15	7
tablets .. 25		9	0 ..	..	1	2 pls4B				20 gm	204	0	49	9
		1000	9	0ea	..	pls4B							29	8
Ampins (339 CG) for bee keepers									Camyna (969 Pfizer)					
box of 3 No. 9B ..		5	0ea	..	6	3			tincture	20 mls	4	3ea	1	0ea
box of 5 ..		8	0ea	..	10	0			lofton	20 mls	4	0ea	1	0ea
Andre Philippe (48 AP)														7 6
after shave lotion 4 oz		102	15	0	7	6	2 6			16 oz	174	0	..	21 9
after shave talc puffer		103	15	0	7	6	2 6			80 oz	840	0	..	105 0
● Angettes (493 Gamble's) tablets									Caphedrodine (211 Butler)					
vitamin A.C.D. ..		28	0 ..	..	3	6				16 oz	174	0	..	21 9
Ann French (655 ICC)														
golden tan ..		18	0 ..	9	0	2	9							
cleansing cream ..		15	9	7	11	2	6							
Anthical (814 M&B)														
cream .. 1 oz		20	0	5	0	2	11							
● Anusol HC (1310 WW)														
ointment		10 gm	90	0	..	..	TS							
Apiella (450 Farthing)														
clear skin lotion		6 oz	57	0	27	10	9 6							
vitaliser plus ..		2 oz	252	0	122	10	42 0							
Aprinox (147 Boots)														
tablets 2.5 mgm ..		100	11	6ea	..	15	4							
		500	52	0ea	..	69	4							
5 mgm ..		100	19	3ea	..	25	8							
		500	92	9ea	..	123	8							
Artane (746 Lederle)														
elixir		16 oz	9	10ea	..	14	9							
tablets 2 mgm ..		100	7	0ea	..	10	6							
		1000	58	6ea	..	87	9							
5 mgm ..		100	14	0ea	..	21	0							
		1000	116	2ea	..	174	3							
Asmaval (378 DCBL)														
tablets .. 25		24	0 ..	..	3	0 pls4B								
		100	72	0 ..	9	0 pls4B								
Aureomycin (340 C of GB) powder 2%														
puffer 15 gm (vet)		66	0	..	..	TSVPO								
ointment 3% ½ oz (vet)		42	6	..	..	TSVPO								
ophthalmic ointment 1% 1oz(vet)16		0	..	..	..	TSVPO								
Ayrotabs (78 AS&Co)		50	40	0	10	0	6 4							

WORLD TRADE

Australia Waives Preferences.—The Australian Government has agreed to waive preferences guaranteed to Australia on nine products under her trade agreement with the United Kingdom. The decision was made at the request of the U.K. Government and applies only to countries of the European Free Trade Association. The nine products affected include eucalyptus oil, wattle bark, and coconut oil of a type not produced in Papua.

PATENTS

(by permission, Controller, H.M. Stationery Office)
COMPLETE SPECIFICATIONS ACCEPTED

From the "Official Journal (Patents)," July 6

Bovine rhinotracheitis vaccine and methods of production, Allied Laboratories, Inc. 846,755.
Indole derivatives, T. J. Smith & Nephew, Ltd. 846,560.

Nitroquinolones, Imperial Chemical Industries, Ltd. 846,611.

P-substituted benzene sulphonamides and processes for the manufacture thereof, J. R. Geigy, A.G. 846,573.

3-substituted 4-hydroxy-benzoic acids and their preparation, Merck & Co., Inc. 846,737.
Production of tetracycline, American Cyanamid Co. 846,610.

Production of phenols, Distillers Co., Ltd. Co. 846,510.

Antibiotic 6798 RP and process for its preparation, Soc. des Usines Chimiques Rhone-Poulenc. 846,801.

Process of replacing active hydrogen by a hydrocarbon group, Abbott Laboratories. 846,631.

Tri-N-propanolamine borate and composition containing same, American Cyanamid Co. 846,374.

Esters of 2-oxo-17 β -hydroxy-A-nor-androstane and the preparation thereof, Organon Laboratories, Ltd. 846,227.

Process for the production of a tryptamine derivative, Laboratoires Français de Chimiothérapie. 846,675.

Steroid compounds, Merck & Co., Inc. 846,909.
 British patent specifications are obtainable (price 3s. 6d. each) from the Patent Office, 23 Southampton Buildings, Chancery Lane, London, W.C.2.

TRADE MARKS

APPLICATIONS ADVERTISED

BEFORE REGISTRATION

From the "Trade Marks Journal," June 29

For all goods (1)
 HI-MATIC, 803,561, by Kodak, Ltd., London, W.C.2.

For soaps, perfumes, non-medicated toilet preparations, cosmetics, hair lotions and dentifrices (3)

DECLAIR, B797,920, by J. & E. Atkinson, Ltd., London, W.1.

For detergents (not for use in industrial or manufacturing processes) (3)

DICAN XX, 801,123, by Diversey (U.K.), Ltd., London, W.1.

For detergents (not for use in industrial or manufacturing processes); toilet soaps; and toilet preparations for the hair (3)

LILT, 801,291, by Thomas Hedley & Co., Ltd., Newcastle-upon-Tyne.

For common soap and detergents (not for use in manufacturing or industrial processes), bleaching powder (for laundry and domestic purposes) and polishing preparations (3)

PEPSAN, 801,802, by British Extracting Co. (Sales), Ltd., Birkenhead, Cheshire.

For mixtures of microcrystalline hydrocarbon waxes for use in manufactures (4)

MULTIWAX, B778,985, by Petroleum Specialties, Inc., New York, U.S.A.

For insecticides (5)

SYSTEMIDON, 784,571, by May & Baker, Ltd., Dagenham, Essex.

For herbal medicines for human use in the treatment of nervous disorders (5)

VITELXIR, 785,229, by Northy-Baker & Co., Ltd., Weston-super-Mare, Somerset.

For bandages, plasters and dressings, all for medical and surgical purposes (5)

Device with letters SNIA, 783,868, by SNIA Viscosa Società Nazionale Industria Applicazioni Viscosa S.p.A., Milan, Italy.

For pharmaceutical preparations containing enzymes, for the treatment of thrombo-embolic disorders, and being for use by injection, or in the form of tablets, pills, capsules, paste or ointment (5)

ACTASE, 792,306, by Ortho Pharmaceutical Corporation, Raritan, New Jersey, U.S.A.

For all goods, but not including sanitary towels or any goods of the same description (5)

LIXIA, B792,633, by Aspro-Nicholas, Ltd., Slough, Bucks.

For antibiotics; pharmaceutical preparations and substances, all containing antibiotics; and materials prepared for bandaging, all being impregnated with antibiotics (5)

LEDERMYCIN, 795,146, by American Cyanamid Company, New York, U.S.A.

For pharmaceutical preparations (5)

MEROCET, 793,519, by Merrell-National (Laboratories), Ltd., London, W.1.

For medicinal and pharmaceutical preparations for external human use in the treatment of the skin (5)

MILESTONE, 796,518, by Wright, Layman & Umney, Ltd., London, S.E.1.

For all goods (5)

Device with letters BRL, B796,769, by Beecham Research Laboratories, Ltd., Brentford, Middlesex.

DIMITRONAL, 800,685, by G. D. Searle & Co., Skokie, Illinois, U.S.A.

CLOVOTOX, 801,538, by May & Baker, Ltd., Dagenham, Essex.

AMPROMIX, 802,014, by Merck & Co., Inc., Rahway, New Jersey, U.S.A.

FIEVAC, 803,090, by Hoechst Pharmaceuticals, Ltd., Slough, Bucks.

For chemical products for medicinal and hygienic purposes (5)

ISATROL, 801,046, by CIBA, Ltd., Basle, Switzerland.

For disinfectants; sanitary and sterilising preparations (5)

SANAKLENZ, 801,049, by Gascoigne-Crowther, Ltd., Caversham, Reading, Berks.

For pharmaceutical preparations and substances for human and veterinary use (5)

ESKORNADE, 802,101, by Smith, Kline & French Laboratories, Ltd., Welwyn Garden City, Herts.

For disinfectants, antiseptics, deodorants and sanitary preparations and substances (5)

SANICAIRE, 802,160, by F. W. Hampshire & Co., Ltd., Derby.

For pharmaceutical preparations and substances for human use in the treatment of respiratory ailments (5)

GLYBRON, 802,559, by R. A. Cripps & Son, Ltd., Portslade, Sussex.

For bags made of plastics, being surgical appliances for use in the treatment of and by persons suffering from colostomy and ileostomy (10)

COLOPLAST, 801,945, by Dansk Coloplast, A.S., Copenhagen, Denmark.

For fitted cases (solid empty) for containing cosmetics and toilet preparations (21)

GALA, 796,604, by Gala of London, Ltd., London, W.1. and Surbiton, Surrey.

From the "Trade Marks Journal," July 6

For photographic chemicals (1)

OPTIPHEN, 800,411, by Ilford, Ltd., Ilford, Essex.

For non-medicated toilet preparations, and soap (3)

TREO, B796,717, by Boots Pure Drug Co., Ltd., Nottingham.

For hair lotions (3)

REVLON SILKEN-NET, 797,071, by Revlon, Inc., New York, U.S.A.

For non-medicated moisture base toilet preparations for the skin for sale in the United Kingdom and for export to the Republic of Ireland and the Channel Islands (3)

Device with words POND'S MOISTURE BASE M, 797,111, by Chesebrough-Pond's, Ltd., London, N.W.10.

For preparations and substances for laundry use (3)

ORA, 797,490, by Boots Pure Drug Co., Ltd., Nottingham.

For non-medicated toilet preparations and cleaning preparations for the hands (3)

NOLO, 799,168, by Benninga (Mitcham), Ltd., Mitcham, Surrey.

For essential oils, essence of badian, cosmetic essences, and flavourings consisting wholly or principally of essential oils (3)

KOTTS, B800,191, by Cumming Parsons, Ltd., Manchester, 9.

For all goods (5)

SALUPRES, 786,941, by Merck & Co., Inc., Rahway, New Jersey, U.S.A.

EUSTOMIN, 797,236, Wellcome Foundation, Ltd., London, N.W.1.

SCORPRIN, 802,676, by Wigglesworth, Ltd., Westhoughton, Lanes.

For medicated creams and medicated lotions (5)

JEPADD, 795,971, by H. C. Moore, Ltd., Darlaston, Staffs.

For preparations for killing or repelling moths (5)
 "SMOTH," B797,196, by Fisons, Ltd., Felixstowe, Suffolk.

For disinfectants, germicides and sterilising compounds (5)

DODIGEN, 797,715, by Farbwerke, Hoechst, A.G. Vormals Meister Lucius & Bruning, Frankfurt-on-Main-Hoechst, Germany.

For pharmaceutical preparations and substances for human and veterinary use (5)

CLORAPRIM, 798,093, by Imperial Chemical Industries, Ltd., London, S.W.1.

For medical and surgical plasters, material prepared for bandaging and surgical dressings, all made of foamed materials (5)

ORTHOFOAM, 800,447, by Jacob Cowen & Sons, Ltd., Dalston, Carlisle.

For pharmaceutical preparations for use in the treatment of cystostasis (5)

ENDOXANA, 800,586, by Asta-Werke, A.G., Brackwede/Westphalia, Germany.

For pharmaceutical preparations for the treatment of superficial infections (5)

CORDISIDE, 800,749, by Calmic, Ltd., Crewe, Ches.

For chemical substances used for veterinary and sanitary purposes (5)

Device with word BENBOWS, 800,818, by Benbow's Dog Mixture Co., Ltd., London, W.1.

For analgesic pharmaceutical preparations in tablet form (5)

ULTRALIEF, 801,062, by Wallace, Cameron & Co., Ltd., Glasgow, C.2.

For pharmaceutical preparations of vitamins in tablet form (5)

ULTRAVITE, 801,063, by Wallace, Cameron & Co., Ltd., Glasgow, C.2.

For radiological contrast media (5)

PERIODAL, 801,253, by A. B. Pharmacia, Uppsala, Sweden.

For pharmaceutical preparations and substances, but not including antiseptics or disinfectants (5)

DEGORAN, 801,520, by D. A. Wander, S.A., Berne, Switzerland.

For pharmaceutical preparations and substances (5)

MERISTINE, PLANAL, 801,521-22, by Dr. A. Wander, S.A., Berne, Switzerland.

For pharmaceutical preparations and substances for human and veterinary use, all for sale in the United Kingdom (5)

SEAVACOL, 801,855, AMALGOVAX, 802,933, by Bayer Products, Ltd., Kingston-upon-Thames, Surrey.

For pharmaceutical preparations for human and veterinary use, sanitary substances, medical and surgical plasters, material prepared for bandaging, disinfectants and antiseptics (5)

IRGARESE, 802,650, by J. R. Geigy, S.A. (J. R. Geigy, A.G.), Basle, Switzerland.

For photographic apparatus (9)

MICREX, 791,762, by Salisbury Precision Engineering, Ltd., Salisbury, Wilts.

For ultra-violet ray appliances and ultra-violet ray appliances combined with infra-red ray appliances, all being electro-medical appliances (10)

BIOTAN, 793,603, by Perihel, Ltd., London, W.3.

For perfume burners and deodorising apparatus, all being electrically operated (11)

DEORAIR, 786,507, by Antoine François Régis Peyron, Paris, France.

For apparatus for conditioning air by disseminating disinfectants, insecticides, bactericides, germicides, deodorisers and other air purifying materials (11)

AEROVAP, 802,025, by Aerovap Holdings, Ltd., Frant, Tunbridge Wells, Kent.

For toothbrushes (21)

BROXODENT, 797,023, by Etablissements, Aesup, Vaduz, Liechtenstein.

For foam rubber sponges impregnated with soap or shampoo (21)

SYLVIA, 799,546, by Sylvia Products, Edinburgh, 11.

For rubber bathing caps (25)

PRINCESS, 796,871, by William Freeman & Co., Ltd., Barnsley, Yorks.

INFORMATION WANTED

The Editor would appreciate information about the following:

Taveners Abyssinian ointment

TELEVISION

Figures in the columns represent number of appearances of the product during the week.

July 24-30	London	Midland	North	Scotland	Wales	South	N.E.	Anglia	Ulster
Alka-Seltzer ..	4	2	3	3	2	1	2	1	2
Anadin ..	—	2	1	8	6	—	—	6	—
André Philippe bubble bath ..	—	—	—	—	—	—	—	1	—
Andre ..	3	—	—	—	—	—	—	—	—
Askit ..	—	—	—	12	—	—	—	—	7
Aspro ..	—	—	—	14	—	—	—	—	—
Beecham's pills ..	1	—	—	—	—	1	—	1	—
powders ..	3	2	1	—	—	—	1	3	3
Biladin ..	—	—	—	—	—	—	2	—	—
Bisodol ..	—	—	—	—	2	—	—	—	—
Bristow's lanolin shampoo ..	—	3	2	1	—	2	—	—	—
Coldrex ..	1	5	5	2	—	4	2	2	—
Coopers aerosols ..	1	1	1	2	—	4	3	5	—
Cuticura ..	2	2	—	—	—	—	—	—	—
Delscy ..	1	3	4	—	1	1	—	1	3
Dextrosol tablets ..	3	3	—	—	—	3	—	—	—
Dispel ..	—	—	—	1	—	—	—	—	—
Dylon wash-creme ..	1	1	1	—	—	1	—	—	—
Eno's Fruit Salt ..	4	2	2	3	2	3	—	3	3
Euthymol tooth-paste ..	—	—	—	—	1	—	—	—	—
Flit aerosols ..	5	5	6	4	5	4	5	4	4
Fynnon salt ..	1	2	3	2	2	3	2	2	2
Germolene ..	1	4	—	—	—	3	2	2	1
Gillette ..	1	3	4	2	5	3	4	5	5
Ingram shaving cream ..	1	—	—	—	—	3	2	1	—
Kleenex ..	1	1	1	1	1	1	1	1	1
Klik ..	—	4	—	—	5	—	—	—	—
Kodak ..	1	3	3	5	3	3	3	3	—
Kwells ..	2	—	—	—	—	—	—	—	—
Loxene hair cream, shampoo ..	1	1	—	—	—	—	—	1	1
Macleans tooth-paste ..	1	2	—	—	—	—	—	—	—
Milk of Magnesia ..	1	—	—	—	—	—	—	—	—
Mix-a-Shake ..	3	—	—	—	3	—	—	—	—
Mum rollette ..	2	—	1	—	—	—	—	2	—
Phosferine ..	1	1	—	—	—	—	—	—	—
Phyllosan ..	1	1	—	1	—	—	—	1	—
Prom ..	2	1	1	1	—	1	1	1	1
Radox ..	2	2	—	—	—	4	—	2	—
Rennies ..	1	—	2	2	2	—	1	2	—
Rinthead pastilles ..	1	1	1	1	1	3	1	—	1
Rivella ..	3	—	—	—	—	—	—	—	—
Saxin ..	3	—	—	—	—	—	4	—	—
ScotTowels ..	3	—	—	—	—	—	—	—	—
Sebbix shampoo ..	3	2	2	2	2	3	2	2	2
Sek ..	1	1	—	2	1	1	1	1	2
Setlers ..	2	1	2	—	2	2	1	—	—
Sparkleen ..	—	—	—	—	—	2	—	—	—
Spree fruit squash ..	6	6	6	6	6	6	6	6	6
Star Spray ..	2	—	—	—	—	1	—	—	—
Twink home permanent ..	4	4	4	4	4	4	4	4	4
Winspray products ..	3	—	—	—	—	—	1	—	—
Yeast-vite ..	1	1	1	1	1	1	1	2	4
Zoflora ..	3	—	—	1	—	—	—	—	—



A FIRST: The first radio battery "dispenser" by the Ever Ready Co. (Great Britain), Ltd., Hercules Place, Holloway, London, N.7, is designed to carry the full range of Power Pack batteries. A limited number only of the sales aids have been made available.

CONTEMPORARY THEMES

Subjects of contributions in current medical and technical periodicals.

INDUCED MUTATIONS in plant crops, *Atom*, July 1960.

COMPARISON of chlorothiazide and meralluride. *J. Amer. med. Ass.*, June 18, 1960.

ANAPHYLACTIC reaction to aqueous chymotrypsin injection, *J. Amer. med. Ass.*, June 18, 1960.

PREANESTHETIC MEDICATION without narcotics, *J. Amer. med. Ass.*, June 18, 1960.

PERSISTENCE of the "hydralazine syndrome," *J. Amer. med. Ass.*, June 11, 1960.

ISOLATION of a non-pathogenic tumour-destroying virus from mouse ascites, *Nature*, July 2, 1960.

A REVIEW of actinobacillosis with a study of the causal organism, *Vet. Rec.*, July 2, 1960.

DISINFECTANTS for bedding, *Soap and Chemical Specialties*, May 1960.

PERFUMING of household specialities, *Amer. Perf.*, June 1960.

PERFUMING OF COSMETICS. Some thoughts on. *Amer. Perf.*, June 1960.

THE "Rarer" ESSENTIAL OILS and their use in perfumery, *Amer. Perf.*, June 1960.

PHARMACOLOGICAL PROPERTIES of some essential oils, *Amer. Perf.*, June 1960.

HISTORY OF PERFUMES, *Amer. Perf.*, June 1960.

SOME NEWER SYNTHETIC chemicals, *Amer. Perf.*, June 1960.

OCCURRENCE OF KETO-ACIDS in blood serum and urine of cattle in comparison with man, horse, sheep and dog, *Nature*, July 9, 1960.

FORMATION of a NEW METABOLITE of epinephrine and norepinephrine in liver and kidney, *Nature*, July 9, 1960.

HAIR-GROWTH, potentiation of, by ultra-violet light, *Nature*, July 9, 1960.

A NEW SPECIES of green sulphur bacteria, *Nature*, July 9, 1960.

SPONTANEOUS DIABETES MELLITUS, *Vet. Rec.*, July 9, 1960.

ROLE OF INTERFERON in recovery from virus infections, *Lancet*, July 9, 1960.

POLIOMYELITIS in the vaccinated, *Lancet*, July 9, 1960.

HISTORICAL ASPECTS of the development of live virus vaccine in poliomyelitis, *Brit. med. J.*, July 9, 1960.

TRACTION ALOPECIA, *Brit. med. J.*, July 9, 1960.

EXPERIMENTAL VACCINATION against measles, *J. Amer. med. Ass.*, June 25, 1960.

TRIAMCINOLONE, Treatment of psoriasis with, *J. Amer. med. Ass.*, June 25, 1960.

PRINT AND PUBLICITY

PRESS ADVERTISING

CHARLES BEDEMAN, LTD., 180 Queen's Road, London, S.E.15: CB lemon cream shampoo. In *Woman*.

BIOMETICA, LTD., Elstree Way, Boreham Wood, Herts: Oil of Ulay. In *Daily Sketch*, *Daily Mirror*, *Daily Mail*, *News Chronicle* and *Woman*. Pinaud men's toiletries. In *Daily Telegraph*, *Daily Express*, *Sunday Times*, *Sunday Express* and *Reader's Digest*. Bu-to. In *Good Time* and women's magazines.

EKCO PLASTICS, LTD., Southend-on-Sea, Essex: Ekco nursery ware. In *The Baby Book*, *Mother, Nursery World*, *Parents*, *Family Doctor*, *Baby Book* & *Diary*.

GOYA, LTD., 161 New Bond Street, London, W.1: Love Affair. In *Daily Mirror*, *Woman*, *Woman's Own*, *Woman's Realm*, *Everywoman*, *Housewife*, *Modern Woman*, *Photoplay*, *She*, *Vanity Fair*, *Woman & Beauty*, *Vogue Beauty Book*, *Honey*, *Date* and *Flair*.

E. GRIFFITHS HUGHES, LTD., P.O. Box 407, Adelphi, Salford, 3: Kwells. In *Radio Times*, television programme magazines and daily and Sunday newspapers.

KATHLEEN COURT, LTD., 67 Effra Road, London, S.W.2: Cooltan. In *Daily Express*, *Daily Mirror*, *Daily Sketch*, *Daily Herald*, *News of the World*, *People*, *Sunday Pictorial* and *Empire News*.

KIMBERLY-CLARK, LTD., Larkfield, nr. Maidstone, Kent: Kleenex. In *Daily Express*.

KODAK, LTD., Kodak House, Kingsway, London, W.C.2: Kodak Brownie movie camera. In *Daily Telegraph*, *Sunday Express*, *Observer*,

Reader's Digest. Kodak cameras and films. In *Daily Express*, *Daily Mirror*, *Daily Mail*, *Daily Herald*, *News Chronicle*, *Daily Sketch*, *Daily Telegraph*, *Eagle*, *Boy's Own Paper*, *Elizabethan*, *New Venture*, *Children's Newspaper*, *Coloursnap*. In *The Illustrated London News*, *Punch*, *Country Life*, *The Geographical Magazine*, *Reader's Digest*, *Woman*, *Woman's Own*, *Woman's Illustrated*, *Queen*, *Field*, *Sunday Express*, *Sunday Times* and *Observer*.

PEPSODENT, LTD., 449 London Road, Isleworth, Middlesex: Spree fruit squash. In *Daily Mirror*, *Daily Express*, *Woman's Own* and *Woman's Illustrated*.

PHILIPS ELECTRICAL, LTD., Century House, Shaftesbury Avenue, London, W.C.2: Philips electric shavers. In *Daily Express*, *Daily Herald*, *Daily Mirror*, *Daily Telegraph*, *News of the World*, *People*, *Parade*, *Tit-Bits*, *Today*, *Men Only*, *Punch*, *TV Times* and *Viewer*.

RECKITT & SONS, LTD., Hull, Yorks: Detol. In *Radio Times*, national Press and women's weekly magazines.

REMINGTON RAND, LTD., 26 Kensington High Street, London, W.8: Princess ladies' electric shaver. In *Daily Telegraph*.



TO LINK WITH BONUS OFFER: Glaxo Laboratories, Ltd., Greenford, Middlesex, have made available the coloured showcard illustrated (HD 155) as an item in their Glucodin/Farex bonus offer. Other display items include two full-coloured Glucodin showcards; a Farex crown; a Farex showcard with three built-in packs; a Glucodin window sticker; Glucodin/Farex pennants; and an explanatory leaflet.

COMING EVENTS

Items for inclusion under this heading should be sent in time to reach the Editor not later than first post on Wednesday of the week of insertion.

Sunday, July 17

BIRMINGHAM PHARMACEUTICAL ASSOCIATION, Council House car park, Warwick Road, Solihull, at 2.15 p.m. Motor treasure hunt.

Wednesday, July 20

SOUTH LONDON AND SURREY PHARMACISTS' GOLFING SOCIETY, Walton Heath golf club. Competition starts at 1.30 p.m.

Thursday, July 21

INTERNATIONAL CONFERENCE AND EXHIBITION ON MEDICAL ELECTRONICS, Olympia, London, W.14. Until July 27.

WILLS

MR. D. L. ANGUS, M.P.S., 3 Granville Avenue, Forest Hall, Northumberland, left £2,432 (£2,388 net).

MR. H. ARNFIELD, Ph.C., M.P.S., Queen's Hotel, Eastbourne, at one time managing director of J. C. Arnfield, Ltd., manufacturing chemists, Stockport, Ches, left £35,741 (£35,027 net).

MR. VICTOR BLAGDEN (founder and former chairman, Victor Blagden & Co., Ltd.), 9 The Manor, Davies Street, London, W.1, left £216,513 (£211,280 net).

Announcement

THE Wright-Fleming Institute of Microbiology has entered into an agreement with Beecham Research Laboratories Limited for promoting the use of vaccines, toxoids and other products made by the Institute for the prevention and treatment of disease. The biological products of the Institute will shortly be packaged and distributed to the medical profession, hospitals and pharmacists by Beecham Research Laboratories Limited.



**BEECHAM RESEARCH
LABORATORIES LIMITED**

** Enquiries regarding Wright-Fleming products should be addressed
to Beecham Research Laboratories Limited, Brentford, England
Telephone: Isleworth 4111*

In addition to Ethicals !

B & C

offer

EXTENSIVE AND WIDELY VARIED
STOCKS OF—

Cosmetics

**Perfumes, Soaps, Bath Salts, Talcs,
Lipsticks, Etc.**

By the Leading Makers—

**MAX FACTOR · MORN
Y
ATKINSON · PONDS · GALA, Etc.**

TAN LOTIONS A SPECIALITY
NIGHT TAN · MAN TAN · MY TAN
HE TAN, Etc.

Butler & Crispe Ltd.

80/84 CLERKENWELL ROAD, LONDON, E.C.1



*We help
create the sales..*



*Be sure
you can supply
the demand*

Our ever-expanding advertising campaigns in the national, provincial and magazine press are constantly stimulating new sales, which mean new customers for you! These plastic processed Showcards from our range of point of sale material available are in full colour and are eye catching, appealing and decorative. We shall be pleased to send you display matter if you will let us know your requirements. Attractive "G" Brand Showcards are also available. Please address your enquiries to



Cow & Gate Ltd (Dept. CD) • GUILDFORD • SURREY

André Philippe

Specially for Men

50%50

No. 102 After Shave Lotion

Price per dozen 15/- plus 50% P.T.

No. 103 Puffer Talc

Price per dozen 15/- plus 50% P.T.

No. 104 ROLL-ON Deodorant

Price per dozen 16/10 plus 25% P.T.

Retail

Price

2/6

each

THE BEST VALUE YET FOR MEN

also AEROSOL HAIR LACQUER

Specially for men No. 101 Price per dozen 30/-

Plus 50% P.T. Retail Price 5/-

FEATURED ON T.V. NOW

Supplies obtainable direct or through usual wholesalers

ANDRÉ PHILIPPE LIMITED

We shall be pleased to send you a complete price list on request



ANDRÉ PHILIPPE PRODUCTS are featured on T.V. weekly until December (See C & D Television Schedule)

71-71B GOWAN AVENUE,
FULHAM, LONDON, S.W.6

Telephone: RENown 2149/2397

Keep your

TABLET CARTONS

tidy

★

SIZES 2, 3, 4, 5
now supplied in
RIGID BOXES
containing 1000
cartons

by

SUTTLEY & SILVERLOCK

ANDOVER, HANTS
TEL. 2234



BURROUGH'S

S.V.R. DOUBLY
RECTIFIED

JAMES BURROUGH LTD.,
1 CALE DISTILLERY LONDON S.E.11

**CHEMIST'S DICTIONARY OF
MEDICAL TERMS 7th Edition**

Prepared primarily for pharmacists, the Dictionary is indispensable also for pharmaceutical manufacturers, advertising agents concerned with the marketing of medicinal products and indeed all who have to find their way around among the multifarious medicinal compounds of modern times.

Order direct from:

PRICE 17/6. Postage 9d.

THE CHEMIST & DRUGGIST

28 ESSEX STREET, STRAND, LONDON, W.C.2

ESTABLISHED 1793

ATKINSON & BARKERS INFANTS' PRESERVATIVE

The Infants' Medicine
of 150 years' standing

For teething and digestive troubles

ROBERT BARKER & SON LTD
13 ALISTAIR STREET, MANCHESTER, 1

INDEX TO ADVERTISERS

Allen, Stafford, & Sons, Ltd.	Front Cover	Cannon Rubber Mfrs., Ltd.	35
André Philippe, Ltd.	4	Cartwright, W. B., Ltd.	5
Armour Pharmaceutical Co., Ltd.	12	Chelsea College of Science & Technology	22
Ayrton, Saunders & Co., Ltd.	8	Cocker Chemicals, Ltd.	Classified Section
		Cow & Gate, Ltd.	3
		Cox, Arthur H., & Co., Ltd.	7
		Cresswell Brothers Sponges	40
Baillière, Tindall & Cox	26		
Barker, Robert, & Son, Ltd.	4	Daniel, Richard, & Son, Ltd.	17
Barnett & Foster, Ltd.	40	Distillers Co. (Biochemicals), Ltd.	Interleaved Edit., 83, 34
Beatson, Clark & Co., Ltd.	20		
Beecham Research Laboratories, Ltd.	1, 16	Easipower Appliances, Ltd.	18, 19
Beetham, M., & Sons	31		
Boutalls Chemists, Ltd.	42	F.A.I.R. Laboratories, Ltd.	Cover iii
Box, W. H.	42	Fassett & Johnson, Ltd.	47
Bradford Institute of Technology	25	Felling Zinc Oxide Co., Ltd.	46
Brighton Technical College	24	Fibrenyle, Ltd.	27
Bristol College of Science & Technology	24	French Perfumery Co., Ltd.	36
British Dyewood Co., Ltd.	40		
British Nylon Spinners, Ltd.	33	George, Ernest J., & Co.	Classified Section
Brook, Parker & Co., Ltd.	12		(continued overleaf)
Brown, N. C., Ltd.	40		
Brown, Neville, & Co., Ltd.	39		
Burrough, James, Ltd.	4		
Burroughs Wellcome & Co.	Interleaved Edit., 84		
Butler & Crispe, Ltd.	2		

W. B. CARTWRIGHT OFFER

CETAL

ANALGESIC & ANTIPYRETIC NON-SALICYLATE TABLETS

PRICES: TAX FREE

Bottle Size	Wholesale	Retail
20 Tablets	15/3 per doz.	1/11 ea.
40 Tablets	26/- per doz.	3/3 ea.

SPECIAL BONUS SHOWS 68% PROFIT ON OUTLAY

CETAL Tablets relieve headaches, period pains, migraine, colds and influenza, neuralgia, neuritis, rheumatism and sciatica.

CETAL Tablets are suitable for both adults and children. They are absorbed quickly and act rapidly. Safe for occasional or prolonged treatment.

CETAL Tablets are non-irritating, non constipating and show no adverse cardiac effects.

CETAL Tablets contain 0.5 Gramme Paracetamol.



DISPLAY BOX CONTAINING:

10 Bottles of 20 Tablets; 2 bottles of 40 Tablets

Retail Value..... **25/8**

Cost to Chemist..... **15/3**

Profit..... **10/5**

W. B. CARTWRIGHT LTD., Rawdon, Leeds

INDEX (cont.)

Gevaert, Ltd.	43	National Glass Works (York), Ltd.	Cover ii
Glass Manufacturers Federation	28	Northampton College	26
Golden, Ltd.	32	Northern Polytechnic	26
Goya, Ltd.	44, 45	Or-Lem, Ltd.	31
Heriot-Watt College	24	Orridge & Co.	Classified Section
Hooper, B., & Co., Ltd.	46	Pascall Knight, Ltd.	34
Ilon Laboratories	38	Peboc, Ltd.	36
Imperial Chemical Industries, Ltd., Pharmaceuticals Division.....	Cover iv	Philips Electrical Appliances	14, 15
International Bottle Co., Ltd.	13	Phillips, Scott & Turner, Ltd.	Interleaved Edit., 29
Johnson & Johnson (G.B.), Ltd.	41	Pitman Medical & Publishing	23
Kalium Products, Ltd.	36	Portsmouth College of Technology	26
Kellys, John (London), Ltd.	38	Rapidol, Ltd.	38
Leicester College of Technology & Commerce	24	Reckitt & Sons, Ltd.—Disprin	37
Lenton Products, Ltd.	7	Rees, L., & Co., Ltd.	21
Macarthy's (Wholesale Chemists), Ltd.	17	Riddell Products, Ltd.	48
Macedonald & Son, Ltd.	10, 11	Robinson Bros., Cork Growers, Ltd.	36
Maria St. George, Ltd.	8	Roche Products, Ltd.	Interleaved Edit., 30
McEwen, Leonard, Ltd.	42	Salesmaster Shopfittings, Ltd.	6
Medico-Biological Laboratories, Ltd.	46	Silber, J. J., Ltd.	49
		Sunderland Technical College	22
		Suttley & Silverlock	4
		Sutton, W., & Co.	9
		Thornton & Ross, Ltd.	42
		University of London	25

Salesmaster shopfittings really do sell *more*. Cleverly designed and craftsman built, they give that "Architect planned" look at standard unit prices. At Regent House we have a complete chemist's shop, fully stocked and fitted throughout, and you are invited to call at any time. Our free Planning and Advisory Service is at your disposal, without obligation of course. Just fill in the coupon or attach it to your letterhead for immediate attention.



"It Pays for Itself"

Salesmaster

SHOPFITTINGS LTD., REGENT HOUSE, DOCK RD., BIRKENHEAD, CHESHIRE.
BIR 8794

Please send me further details of your
Free Planning & Advisory Service

CD

NAME

ADDRESS



packaging

manufacturing

For the supply of perfectly packed and ethically presented pharmaceutical preparations including an attractive "Own Name—Own Brand" range of designs, no other manufacturer offers so comprehensive a service for retailers, wholesalers and proprietary brand houses. It is backed by 120 years' experience in studying the needs of pharmacists.

ARTHUR H. COX & CO. LTD.

A Complete Service for Pharmacists

BRIGHTON · ENGLAND

Yalcs
 NYLON ELASTIC HOSIERY
 incorporating **BRİ-NYLON**

Recommend Yalcs with confidence to women with actual or incipient varicosities. Yalcs give all the therapeutic support of true two-way stretch—without putting a strain on vanity!

Yalcs are available ex stock—at full trade discount—in two types:

Superfine Retailing at 63/- pair

SERVICE Retailing at 53/3 pair

Yalcs Service may be supplied against N.H.S. prescription in Nylon Elastic Yarn (Lightweight) Two-Way stretch.

Yalcs Elastic Socks for men also available.

Display material, leaflets, shade cards available from Sales Agents:—

GLENSIDE (LONDON) LTD, 37 Percy St, London, W1

LENTON
 TWO-WAY STRETCH
Surgical Hosiery

For strong support in severe cases of varicosity, Lenton stockings are made from hard-wearing cotton-covered elastic. Soft-textured, with stretch Nylon welts, they can be recommended to your customers for comfort and therapeutic firmness. Lenton can be dispensed against prescriptions for "two-way stretch elastic yarn hosiery." They are available in two styles, in small, medium and large sizes.

ABOVE KNEE RETAILING AT 53/3 A PAIR

BELOW KNEE RETAILING AT 45/9 A PAIR

Open-toed for coolness, with closed heels for a snug fit, Lenton hosiery can be worn by both men and women. Lenton are made by the manufacturers of Yalcs stockings.

Details from Sales Agents:

GLENSIDE (LONDON) LTD., 37 PERCY ST., LONDON W.1

L1

Buy your Packed Pharmaceuticals on THE HOUSE OF SUTTON

3-POINT CONTRACT TERMS

3
MONEY-
SAVING
OFFERS

1. We offer stable prices.
2. Bonus of 13 for 12.
3. Minimum quantity 5 gross assorted over 12 months less 5%.

For each additional gross above the minimum up to 20 gross, an additional 1% per gross.

(Cheque, Credit Note or Free Goods.)

Packed goods, well presented give you prestige and build up extra worthwhile business.

Our Packed Pharmaceuticals are guaranteed to conform to the highest ethical standards. Let us know your needs. Why not talk it over with our Representative? It can mean extra, profitable business.

CHOICE
OF 3
LABELS



PACKED
GOODS
DIVISION

W. SUTTON & Co.
DRUGGISTS SUNDRIES LONDON
LIMITED

HORSESHOE LANE, ENFIELD, MIDDLESEX. Enfield 4747 (Private Branch Exchange) Also Albert Road, Newbury, Berks. Newbury 1461/2

NEW COLOUR PACKS

DESIGNED TO INCREASE YOUR SALES

Delicate pastel colours and an outstanding design using the Silcot motif immediately establish the supreme quality of Silcot santowels. A tear-off size-and-price tab is attached for customer convenience. The new Silcot pack will not only increase your sales but also add to the prestige of your pharmacy.

COLOUR CODED FOR SIZE

SIZE 0 ORANGE GOLD	SIZE 1 LEAF GREEN	SIZE 2 DUSKY PINK	SIZE 3 SILVER GREY	SIZE 4 SPRING LILAC
-----------------------	----------------------	----------------------	-----------------------	------------------------

UNIQUE DISCOUNT PLAN

Your **total annual** purchases qualify for these extra discounts which are allowed on Silcot santowels.

£30 AND OVER IN TWELVE MONTHS $3\frac{3}{4}\%$

£60 AND OVER IN TWELVE MONTHS 5%

£120 AND OVER IN TWELVE MONTHS $7\frac{1}{2}\%$

SPECIAL DISPLAY BONUS

The new Silcot merchandiser display has been specially designed with the discreet customer appeal of the new packs in mind. By displaying this Silcot merchandiser you receive a generous bonus. Ask your representative for full details.



**PUT SILCOT
ON DISPLAY—
THE PACKS &
NATIONAL
ADVERTISING
WILL DO THE REST**



FOR

Silcot



Silcot
SANTOWELS

MACDONALD & SON LIMITED

PORTLAND MILL, ASHTON-UNDER-LYNE, LANCs.

Tel: ASHTON 4422 (10 LINES)

AND 25 HOLYWELL ROW, LONDON, E.C.2.

Tel: BISHOPSGATE 4809 (2 LINES)

BROOK PARKER & CO. LTD.

ASHFIELD
BRADFORD 7

Specialists in-GALENICALS, PHARMACEUTICAL
CHEMICALS, ETHICALS, PACKED MEDICINAL
SPECIALITIES, TABLETS, PILLS, CAPSULES,
N.H. SUNDRIES, VETERINARY PREPARATIONS,
INSECTICIDES, and DETERGENTS.

Direct importers of all VEGETABLE DRUGS.
Factors of PHOTOGRAPHIC & ELECTRICAL GOODS.

for
Home
and
Export
Markets

also at
314 DUKE STREET
(Mr. Duncan McKeitch)
GLASGOW, E.I.

TELEPHONE: BRIDGETON 0127

'Phone: BRADFORD
32281 - 2 - 3 - 4 - 5
(5 lines)

'Ansafone'
Bradford 32285
24 Hour Service
Grams :
BROPARCO,
BRADFORD



ARMOUR PHARMACEUTICAL

News

Pharmacists everywhere will welcome the news that
Armour research has — in Biocortar — evolved
another preparation which is playing an increasingly
important part in modern medicine.

*The Armour plant at
Eastbourne, Sussex.*



ARMOUR PHARMACEUTICAL
COMPANY LTD
EASTBOURNE · SUSSEX · ENGLAND

Progress in treatment of Hay Fever & Bronchial Asthma

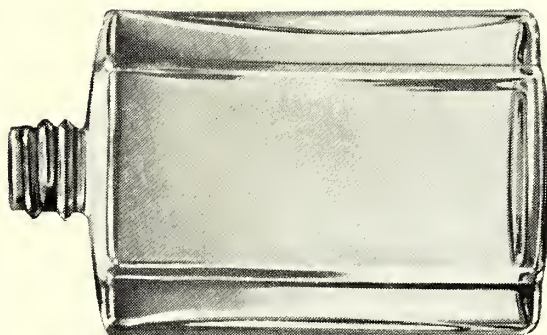
The treatment of allergic conditions of the
mucous membrane is greatly assisted by
oral inhalation of Hydrocortisone acetate
(now marketed under the name **BIOCORTAR**),
which was introduced by Armour Pharma-
ceutical Company in 1956.

BIOCORTAR (supplied in capsule form) is
blown into the nostrils by means of the
Armour Powder Insufflator. Many cases of
hay fever are completely controlled in 10-14
days, and most encouraging results are
obtained in the treatment of bronchial
asthma—especially "dry" asthma, in which
the results are quite dramatic. **BIOCORTAR**
is being promoted to the medical profession
now.

BIOCORTAR



High Quality Glassware



THE INTERNATIONAL BOTTLE CO., LTD.

140 PARK LANE LONDON W.1

Telephone MAYfair 6992 (5 lines) Telegrams AUTREFOIS, AUDLEY, LONDON



Designers and Manufacturers of



You've such a valuable friend in...

You've such a valuable friend in Philips.
For Philips make so many different
products – all so easy to sell!

Yes, millions of families have learned
that Philips means unsurpassed depend-
ability and technical mastery combined
with world-beating value. So get bigger-
than-ever business with Philips – the
friend of the family!



PHILIPS PHILISHAVE

... a superb shaver to boost your sales! For this Standard-volt 'Philishave' retails at only £7.7.0, and has all the advantages of 'Philishave' Rotary Action! Only Rotary Action shaves the bristles the very way they grow. Result? Only the 'Philishave' shaves so close so comfortably – and sells so effortlessly. Keep ahead of your customers – order in good supplies now!

The Standard-volt 'Philishave' (AC/DC 200-250v.) **£7.7.0** (tax paid)

And, of course, you'll also need . . .

The Dual-volt 'Philishave' **£8.9.9** tax paid) The Battery model 'Philishave' **£7.12.9** (tax paid)



PHILIPS



PHILIPS ELECTRIC *Whiskette*

Invaluable, inexpensive whisk for all liquids — from cocktails to baby foods, from mayonnaise to meringues. Stainless steel and white nylon whisk of revolutionary design. Strikingly easy to operate and clean. Two-tone styling — Dove Grey and White plastic casing. 230-250v. AC operation only.

Only **£3.18.9** (tax paid)

PHILIPS *electrically heated* Blankets

The new Standard range: made in soft, fleecy woollen mixture in attractive shades of gold or pink. Heating element covered in tough, flexible plastic. Flame-proofed throughout for perfect safety. Handy on/off switch.

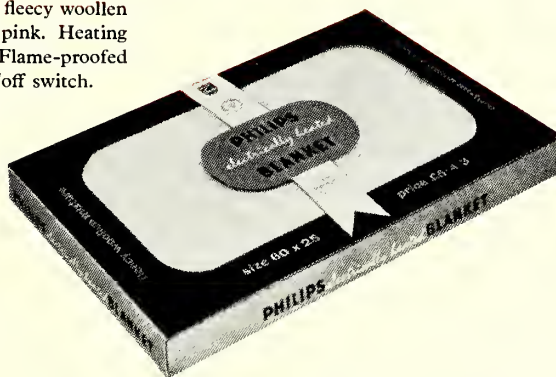
60" x 25" **£5.4.3** (tax paid)

60" x 43" **£7.12.9** (tax paid)

The De-Luxe range: unsurpassed for comfort and safety. Made from 100% pure wool in soft peach shade. Adjustable 3-heat temperature control.

60" x 28" **£7.2.6** (tax paid)

60" x 48" **£11.4.0** (tax paid)



PHILIPS HEALTH LAMPS

— so much in demand for treating so many ailments!

Philips Ultra-violet "Ultraphil" is most useful in the treatment of sun-starved "run down" conditions, and many skin troubles such as psoriasis and acne. It radiates ultra-violet light only on the most beneficial wavelengths.

£5.17.6 with goggles

Philips Infra-red "Infraphil" is invaluable in all cases of arthritis, rheumatism, fibrositis and muscular pain. Used in the medical centres at the Olympic Games for the treatment of pulled and strained muscles.

£3.3.0 De-Luxe model: **£4.4.0**

Philips Health Lamps, made in Holland, are only available to customers who have a medical certificate.

PHILIPS ELECTRICAL LIMITED · ELECTRICAL APPLIANCE GROUP
Century House · Shaftesbury Avenue · London · W.C.2.

— the friend of the family



**fine
chemicals**

**ALUMINIUM
GLYCINATE** ("D.A.A.")

of pharmaceutical purity

Aluminium glycinate finds increasing favour as a safe and reliable buffer antacid in gastroenterology.

Beecham Research Laboratories Ltd. are foremost producers of this compound and can offer any quantity at competitive prices.

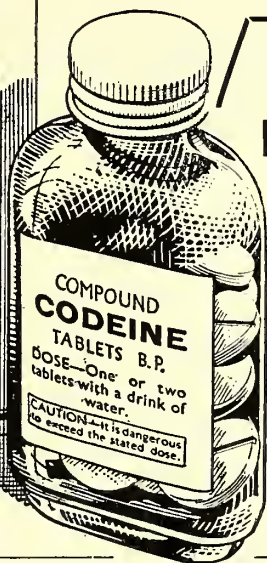
Manufactured by the Fine Chemicals Division of

**BEECHAM RESEARCH
Laboratories Ltd.**

BRENTFORD MIDDLESEX

Telephone: ISLeworth 4111

Telegrams: Research Brentford, Hounslow



PACKED TABLETS FOR COUNTER SALE

Manufactured by
**RICHARD DANIEL
& SON LTD.**

PRICE LIST ON APPLICATION

MANSFIELD ROAD, DERBY

TELEPHONE - - 40671 (10 LINES)

ALSO AT ASHTON-UNDER-LYNE

TELEPHONE - - 5161 (9 LINES)

**DOCTORS CASES • EXAMINATION COUCHES
STERILIZERS • SPHYGMOMANOMETERS
SCISSORS • FORCEPS • TROLLEYS Etc.**



*"Yes doctor, we can arrange that for you,
Macarthy's of Romford are able to
supply or repair all consulting room instruments
and equipment with speed and efficiency. They
always have a comprehensive selection of instruments
available in their stockrooms which they
will send to any pharmacy in the
country by return of post."*



SPECIALISED FURNITURE, CLINICAL DIAGNOSIS APPARATUS
OR SURGICAL INSTRUMENTS FOR USE IN THE SURGERY

MACARTHYS
(WHOLESALE CHEMISTS) LTD

MACROM HOUSE • SEYMER ROAD • ROMFORD • ESSEX • Tel: Romford 46021

This is your dream

THE BIGGEST-EVEN AN ELECTRIC BLANKET

with a readership and
viewership totalling more
than 178 million

Dream

PRESS AND



ne true!

NGLE PROMOTION OF COMING SOON!

land



LEVISION ADVERTISING

BIG, COMPELLING ADVERTISEMENTS

in DAILY EXPRESS
SUNDAY PICTORIAL
PEOPLE • SUNDAY POST
le pages in IDEAL HOME
USE BEAUTIFUL • HOME

*
*
*
*
*
*
*

30-SECOND SPOTS

at popular viewing times on

LONDON • MIDLANDS
NORTH • SCOTTISH
TWW • ANGLIA

60-second spots
SOUTHERN • TYNE TEES

HOWCARDS - LEAFLETS - £5000 COMPETITIONS
- AND AN EXTRA 5% DISCOUNT FOR YOU!

NT WAIT-SEND NOW

details of this wonderful support for
AND—the electric blanket which gives
ugh, all-over warmth.

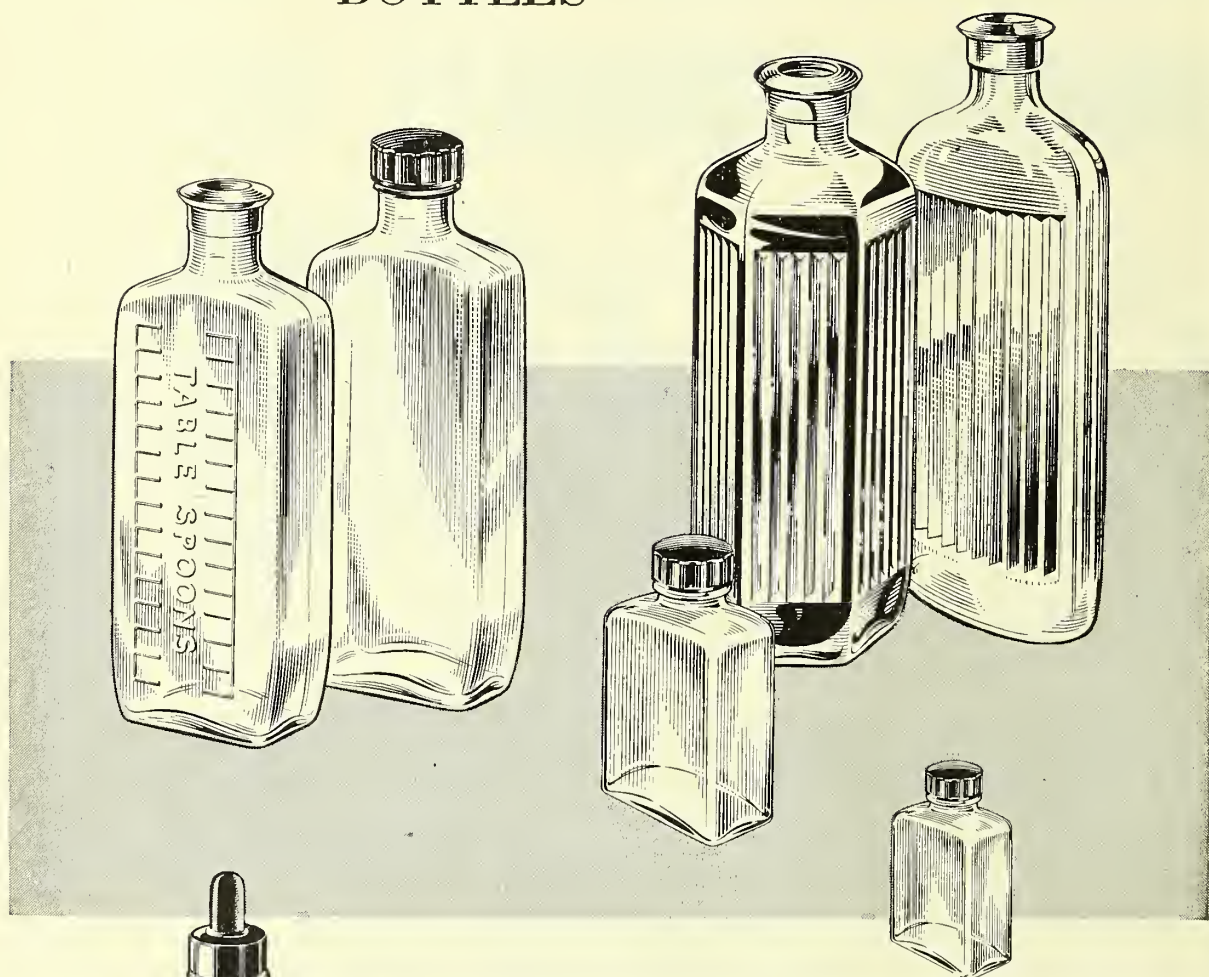
TO: EASIPower APPLIANCES LIMITED
30 HIGH STREET, SOUTHAMPTON. Telephone: SOUTHAMPTON 27947/8

*Please send me full details of the great
Dreamland promotion and the extra
benefits available to me.*

CLIP YOUR LETTER-HEAD TO THIS COUPON
AND SEND IT OFF RIGHT AWAY.

C.2

BEATSON DISPENSING BOTTLES



ANOTHER BEATSON SERVICE!

To ensure maximum protection against dirt and dust, all bottles from our dispensing range are packed in the Beatson Sealed Carton to maintain them in "production clean" condition until use.



"The Sign of a



Good Bottle"

Be sure to specify BEATSON

BEATSON, CLARK & CO., LTD.

GLASS BOTTLE MANUFACTURERS

ROTHERHAM

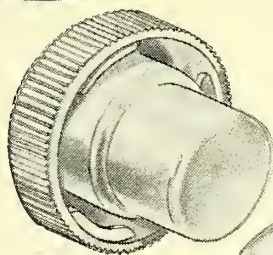
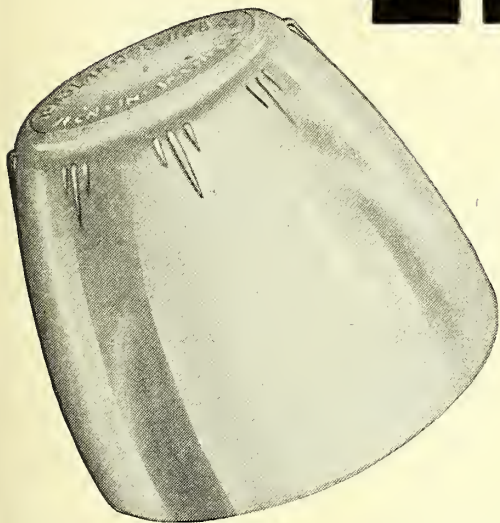
Established 1751

YORKSHIRE

ISOVAC

GOLD SEAL

VACUUM FLASK



Now in 3 sizes

MINOR (8 fl. ozs.)
STANDARD (16 fl. ozs.)
FAMILY (36 fl. ozs.)



- New Polythene stopper with quick-lock fitting, leak-proof on a quarter turn. Washable and odourless.
- No threads to "gum up"
- Drip-free all round pouring lip.
- Centre-sealed tip, permanently protected.
- Glass lining supported by polythene shock pad.
- Almost unbreakable plastic cup.
- Separately packed in attractive cartons.

All the top-selling features of the 'Standard' ISOVAC Gold Seal Vacuum Flask are now incorporated in the new 'Minor' and 'Family' Flasks. 'LUSTREEN' finished in Blue, Green or Lilac, and attractively boxed for display purposes.

When ordering please quote these reference numbers:

'Minor' (880).....6/6

'Standard' (881)....7/4

'Family' (883).....12/6

Retail prices (inc. P.T.)

MADE IN ENGLAND



CHELSEA COLLEGE OF SCIENCE AND TECHNOLOGY

MANRESA ROAD · CHELSEA · LONDON S.W.3.

CHELSEA SCHOOL OF PHARMACY

Approved courses for the
B.PHARM., M.PHARM., and PH.D. DEGREES
of the University of London, and for the
QUALIFYING EXAMINATION OF THE PHARMACEUTICAL SOCIETY
are described in a prospectus obtainable free on
application to the Head of the School of Pharmacy.

SUNDERLAND EDUCATION COMMITTEE SUNDERLAND TECHNICAL COLLEGE

PRINCIPAL:

D. A. Wrangham, M.Sc., Sen. Wh.Sch., D.I.C., M.I.Mech.E., A.C.G.I.

DEPARTMENT OF PHARMACY

HEAD OF DEPARTMENT:

F. H. Oliver, B.Sc., B.Pharm., F.P.S.

Full-time Courses of study are held for :—

THE EXAMINATIONS OF THE PHARMACEUTICAL SOCIETY
(Old and New Regulations)

**FINAL BACHELOR OF PHARMACY EXAMINATION OF
UNIVERSITY OF LONDON**

Facilities are available to prepare Graduates for further Degrees

Session commences October 3, 1960

Registration, Wednesday, September 14, 1960, 2.30—3.30 p.m.

Prospective students should make immediate application for prospectus and forms to the Registrar, The Technical College, Sunderland, Co. Durham.

W. Thompson, *Director of Education.*

To be published this year

SECOND VOLUME OF

U.S.D.

NEW DRUG DEVELOPMENTS

The United States Dispensatory is completely revised every ten years, but every five years a second volume—"New Drug Developments" is published to bring the current edition up to date. In accordance with custom therefore "New Drug Developments," Volume 2 of the 25th Edition of the U.S.D. will be published this year. The volume will contain a complete commentary on new developments since 1955. Those who already have U.S.D. 25 may buy volume 2 as a separately bound volume. It will also be available bound up with volume 1 as a single volume. The price of volume 2 will be about £5.

NEW AND NON-OFFICIAL DRUGS 1960

The usefulness and the demand for this outstanding yearbook continue to grow each year. There is no doubt that this book is absolutely essential for all who use drugs professionally. The price remains at 30s. net

AMERICAN DRUG INDEX 1960

Another increasingly popular yearbook. Presents a thorough indexing and cross-indexing of over 12,000 drug preparations. Drugs are listed by generic name, trade name and pharmacologic group. Synonyms are also given. Methods of supply, dosage forms, usual dosage and manufacturer's names are also given. 45s. net.

A TEXTBOOK OF PHARMACOGNOSY

T. C. Denston. A well-known and widely recommended work giving a detailed account of the cultivation, collection, drying and preservation, characters and constituents of drugs of vegetable and animal origin. 5th Edition. 50s. net.

THEORETICAL PHARMACEUTICAL CHEMISTRY

C. G. Lyons and F. N. Appleyard. Includes within a single volume the essential principles of physical, inorganic and organic chemistry as related to pharmaceutical purposes. 2nd Edition. 30s. net.

TUTORIAL PHARMACY

John W. Cooper and Colin Gunn. A new edition of this well-known and heavily demanded work. Much revision has been carried out and a considerable amount of new matter added. 45s. net.

PRACTICAL PLANT CHEMISTRY FOR PHARMACY STUDENTS

E. J. Shellard. A new book, being a practical laboratory guide for students. All classes of drug constituents are covered together with reactions and tests for each. 17s. 6d. net.

PITMAN MEDICAL PUBLISHING CO. LTD.

39 PARKER STREET · LONDON · W.C.2

BRIGHTON TECHNICAL COLLEGE

Principal :
GORDON E. WATTS, M.A., Ph.D., B.Sc., F.R.I.C.
SCHOOL OF PHARMACY
*Officially approved by the Pharmaceutical Society and
the University of London.*

Head of School :
James C. Parkinson, Ph.D., B.Pharm. (London),
F.P.S., F.R.I.C.

Session Commences TUES., 20th SEPT., 1960

The following Full-time Day Courses are offered

**ENTRANCE EXAMINATION;
PHARMACEUTICAL CHEMIST
QUALIFYING (TWO YEAR COURSE)
DEGREE IN PHARMACY
(B.PHARM. UNIVERSITY OF LONDON)**

Applications for places in the session commencing September 1961 must be made not later than January next. Excellent conditions of work and ample social and athletic activities characterise the school. Students' demonstrators are offered to suitable students who desire to continue their studies after graduation.

For Prospectus apply to
THE REGISTRAR,
Technical College, BRIGHTON
or to the undersigned

W. G. Stone, Director of Education and Clerk to the Governors
54 Old Steine, Brighton

EDINBURGH HERIOT-WATT COLLEGE

(Incorporating the Royal Public Dispensary
School of Pharmacy)

DEPARTMENT OF PHARMACY

Principal of College :
HUGH B. NISBET, Ph.D., D.Sc., F.R.I.C., F.R.S.E.

Head of Department :
H. H. CAMPBELL, A.H.W.C., B.Sc., F.R.I.C., F.P.S.

**Entrance Examination
Pharmaceutical Chemist Qualifying
Examination**

**Associateship of the Heriot-Watt
College in Applied Pharmacy**

Courses of lectures combined with laboratory and tutorial instruction are provided in the subjects of the examinations. The session extends from October to June.

Prospectus free on application.

City of Leicester Education Committee

LEICESTER COLLEGE OF TECHNOLOGY & COMMERCE

School of Pharmacy

Principal: R. E. WOOD, M.Sc., F.Inst.P.
Head of School: C. GUNN, B.Pharm., F.P.S.

COURSES FOR
Entrance Examination
Pharmaceutical Chemist
Qualifying Examination
General Certificate of Education
(Advanced Level) Examinations
Bachelor of Pharmacy degree of the
University of London

For prospectus and details of hostel and boarding accommodation apply to the Registrar, Leicester College of Technology and Commerce, Leicester.

BRISTOL COLLEGE OF SCIENCE & TECHNOLOGY

(COLLEGE OF ADVANCED TECHNOLOGY)

Principal :
G. H. MOORE, M.Sc., F.P.S., F.R.I.C.

SCHOOL OF PHARMACY

Head :
D. A. NORTON, B.Sc., F.P.S., A.C.T. (Birm.).

QUALIFYING EXAMINATION OF THE PHARMACEUTICAL SOCIETY

The Course for this examination will commence on 13th September, 1960.

The School provides attractive conditions for study and recreation in well-equipped premises.

The Prospectus may be obtained on application to :

The Registrar,
College of Science & Technology,
Bristol, 7.

SCHOOL OF PHARMACY UNIVERSITY OF LONDON

29/39, Brunswick Square, London, W.C.1

Tel. No. TERMINUS 7651

DEAN :

PROFESSOR W. H. LINNELL, D.Sc., Ph.D., F.P.S., F.R.I.C.

CLERK TO THE COUNCIL and SECRETARY :

S. R. CURTIS, B.A., A.C.A.

HEADS OF DEPARTMENTS :

Pharmaceutical Chemistry	Professor W. H. Linnell, D.Sc., Ph.D., F.P.S., F.R.I.C.
Pharmaceutics	Professor E. Shotton, B.Sc., Ph.D., F.P.S., F.R.I.C.
Pharmacognosy	Professor J. W. Fairbairn, B.Sc., Ph.D., F.P.S., F.R.I.C., F.L.S.
Pharmacology	Professor G. A. H. Buttle, O.B.E., M.A., M.R.C.S., L.R.C.P.

Courses of training for the B.Pharm.(Honours) Degree of the University of London, and facilities for post-graduate work in all subjects of the degree, are provided.

Particulars may be obtained on application to the Dean.

BRADFORD INSTITUTE OF TECHNOLOGY

DEPARTMENT OF PHARMACY

Course for DEGREE IN PHARMACY (B.PHARM.) OF THE
UNIVERSITY OF LONDON

THREE YEAR COURSE FOR THE QUALIFYING
EXAMINATION OF THE PHARMACEUTICAL SOCIETY

Facilities for post-graduate work leading to the M.Pharm. and Ph.D. degrees of
the University of London are available.

Further particulars and forms of application from the Registrar

BRADFORD INSTITUTE OF TECHNOLOGY · BRADFORD 7

CITY OF
PORTSMOUTH
 COLLEGE OF TECHNOLOGY
 DEPARTMENT OF PHARMACY AND
 PHYSIOLOGY

Head of Department:
 E. THORPE, B.Pharm., B.Sc., F.P.S.

COURSES FOR
 General Certificate of Education
 and
 The Qualifying Examination
 of the Pharmaceutical Society

**SESSION COMMENCES
 SEPTEMBER 19th, 1960**

Application forms and full particulars may be
 obtained from THE REGISTRAR.
 COLLEGE OF TECHNOLOGY, PORTSMOUTH.

H. W. FOWLER,
B.Pharm., F.P.S.
 Aids to
**FORENSIC
 PHARMACY**

Latest edition of a popular title in the Students' Aids Series which covers the requirements in Forensic Pharmacy of the Pharmaceutical Society's Qualifying Examination and the University of London! degree in Pharmacy and also caters for the needs of Medical and Veterinary Students and Practitioners.

5th Edition.
 235 pages. 63 illus. Price 12s. 6d. postage 1s.

**BAILLIÈRE,
 TINDALL & COX**

7 & 8 Henrietta Street, London, W.C.2

A Modern Version of an Old Favourite

The Art of Dispensing Price 21/- (postage 1/4)

"The Art of Dispensing" is the most economical complete and up-to-date manual dealing with the pharmacist's work at the dispensing counter. Explained in simple yet concise fashion, this book is a necessary part of the equipment of every dispensary. New ideas have been incorporated and scientific knowledge has been added to the art formerly based on skilful training during apprenticeship and from experience gained in pharmacies of international repute.

Order from your Bookseller or direct from The Publisher

The CHEMIST AND DRUGGIST
 28 ESSEX STREET • STRAND • LONDON • W.C.2

NORTHERN POLYTECHNIC
 HOLLOWAY, LONDON, N.7

Recognised Day courses for the Intermediate PHARMACEUTICAL and 1st Medical Examinations. Evening courses for the 1st Medical Examinations. Day and Evening Courses in CHEMISTRY, PHYSICS, MATHEMATICS, GEOLOGY, BOTANY and ZOOLOGY for Internal and External DEGREE EXAMINATIONS of the University of London. Facilities for post-graduate research in chemistry.

New Session begins 26th September, 1960

Prospectus free on application. Tel: NORTH 1686

**NORTHAMPTON COLLEGE
 OF
 ADVANCED TECHNOLOGY
 LONDON**

ST. JOHN STREET, LONDON, E.C.1

DEPARTMENT OF OPHTHALMIC OPTICS

HEAD OF DEPARTMENT:

J. Walton, H.D.S.M.C.

Full Time Day, Part Time Day and Evening
 courses in

OPHTHALMIC AND DISPENSING OPTICS

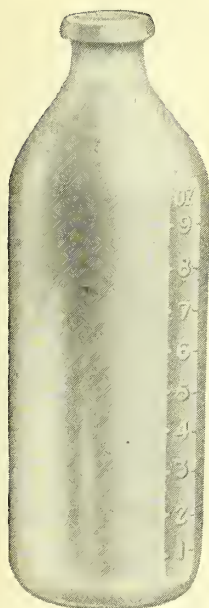
*Preparation for Qualifying Examinations,
 F.S.M.C., F.B.O.A., D.Opt., F.A.D.O.*

Also advanced refresher courses

Full particulars may be obtained from Head
 of Department.

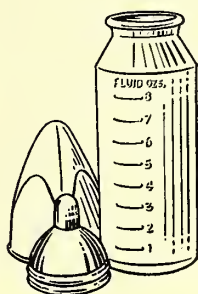
"Skylon"

**THE ORIGINAL
POLYTHENE
FEEDING BOTTLES**



Narrow Neck RETAIL
Feeding Bottle **2/6**

PATA



Dual Purpose [RETAIL
Feeding Bottle **4/4**
with No-germ
Cap

**Hygienic, tasteless, odourless, unaffected
by foodstuffs, standard valves and teats
fit narrow neck and boat-shape bottles.
Sterilizing instructions with each bottle.**

Obtainable from
your usual
Wholesaler



F I B R E N Y L I E
L I M I T E D
157 DUKES ROAD, LONDON, W.3
ACORN 5073-4

By far the best value for this type of product

JACW/CD/5



THE CHEMIST AND DRUGGIST

ESTABLISHED 1859

The weekly newspaper for pharmacy and
all sections of the drug, pharmaceutical and
fine chemical, cosmetic, and allied industries

*Official organ of the Pharmaceutical Society of Ireland
and the Pharmaceutical Society of Northern Ireland*

Volume 174

July 16, 1960

No. 4196

CONTENTS

A Fellow of the Royal Society ...	71
A Pharmacy Teacher's Problems ...	75
Consumer Tests ...	67
Consumption of Medicines ...	69
Control of Medicines ...	67
Co-operative Chemists ...	67
Cumulative Price List ...	85

EDUCATIONAL INFORMATION:

Requirements for Registration ...	76
Pharmacy Courses Tabulated ...	78
Other Courses ...	79
Government Chemist ...	68
Hospital Pharmacy Forum ...	72

Leading Articles:

Pharmacists of the Future ...	73
Seeking Efficiency in Distribution ...	73
Pharmaceutical Society of Northern Ireland: Young Scholarship Fund ...	69
Rôle of the Pharmaceutical Society ...	74
Topical Reflections ...	63

Births ...	65	Patents ...	91
Coming Events ...	92	Personalities ...	65
Company News ...	64	Print and Publicity ...	92
Contemporary Themes ...	92	Television ...	92
Deaths ...	65	Trade Marks ...	91
In Parliament ...	64	Trade Notes ...	66
New Books ...	70	Trade Report ...	81
New Products ...	66	Wills ...	92

INDEX TO ADVERTISERS, Pp. 5 & 6.

Classified Advertisements, p. 50.

PUBLISHED BY

MORGAN BROTHERS (PUBLISHERS), LTD.,
at 28 Essex Street, Strand, London, W.C.2

Telephone: Central 6565

Telegrams: Chemicus, Estrand, London

WOLVERHAMPTON: 89 Woodland Avenue, Tettenham Wood.
GLASGOW: 160 Nether Auldhouse Road, S.3. Phone: Langside 2679.
LEEDS: 16: 32 Wynford Rise, West Park. Phone: Leeds 67 8438.

ANNUAL SUBSCRIPTION

which includes The Chemist and Druggist Diary and
Year Book, £2 10s. Single copies one shilling each.



...but will Mrs. Jones like it?

The Glass Container-acceptance Testing Service will make sure

At last! The new pack is agreed. Around the table heads nod expert approval . . . but Mrs. Jones (average housewife) does not nod her head—she is not at the meeting. A pity! Because Mrs. Jones, A.H., is the ultimate, infallible authority on pack design. If she gives it the nod, it's right—if she doesn't, it's wrong.

How sensible then to cut out some of the guesswork by calling Mrs. Jones into consultation. You can do this very easily now, and it costs you nothing. Britain's Glass Manufacturers have set up the Container-acceptance Testing Service for the specific purpose of providing Packers with facilities to test consumer reaction to new packs *before* they go into mass production. Designs can be tested in any or all of the following four progressive stages.

1. Design Preference Testing. Any new design can be tested on a consumer panel of 400 households. Their preferences will be analysed and presented to the Packer as a report and recommendation.

2. Container in Use Testing. The new container and its product can be tested in actual use in the home. The panel's experience of the new pack will be recorded, analysed and furnished as a report.

3. Shelf Testing. The sales appeal of a new pack can be tested in self-service or other stores, and the speed and volume of off-take audited and analysed by type of shop and locality. The pack may be tested either alone or against any alternative.

4. Area Test Marketing. Facilities are available for area test marketing any new product. An expertly staffed marketing service has been estab-

lished which will plan, organise and, if desired, execute test marketing campaigns in their entirety for Packers launching new glass packed products.

Free Service. All the facilities under headings 1, 2 and 3 are offered *free* to the packing industry. In the case of Area Test Marketing schemes however, a nominal charge will be made for planning the operation.

Security. Any of these operations can be executed with absolute security. Packers can have complete anonymity by employing one of the several specially registered brand names.

Details of this scheme have been published as a booklet, copies of which are available on request from your Glass Manufacturer or from the Federation.



See how good things are in **GLASS**



THIS IS AN ADVERTISEMENT OF
THE GLASS MANUFACTURERS' FEDERATION
19 PORTLAND PLACE • LONDON W1
TELEPHONE: LANGHAM 6952

DROXALIN

ACID ADSORBENT

*Palatability—plus remarkable
initial speed of action*



LIQUID FORM

As a consequence of the wide and successful prescribing of DROXALIN TABLETS in gastric ulcer, hyperacidity and sickness of pregnancy, a demand arose for a liquid version of the DROXALIN formula.

Introduced in 1958 as DROXALIN GEL this liquid formulation already has made a high reputation and is now widely prescribed.

DROXALIN GEL is remarkable in its initial speed of action. Over the first two minutes, it is as much

as three times as effective as the most prescribed acid adsorbents—Aluminium-Hydroxide or a well prescribed mixture of Magnesium Trisilicate and Aluminium Hydroxide.

This initial speed of action is a potent factor in the management of gastric pain.

DROXALIN produces no acid rebound or other harmful side effects. The well known palatability of DROXALIN tablets is maintained in the Gel.

DROXALIN

ACID ADSORBENT

ACTIVE INGREDIENTS

TABLETS

Dried Aluminium Hydroxide Gel B.P. 2.5 grains
Magnesium Trisilicate, B.P. 2.5 grains

GEL

One teaspoonful (3.5 mls) contains 60 grains
Aluminium Hydroxide Gel B.P. (equivalent
to 5 grains Dried Aluminium Hydroxide Gel B.P.)
and 5 grains Magnesium Trisilicate B.P.

DOSAGE

TABLETS In gastric ulcer: 2 to 4 tablets, chewed,
every 2-4 hours.
In hyperacidity and Sickness of Pregnancy:
2 tablets as required.

GEL In gastric ulcer: one or two teaspoonfuls half
an hour after meals. Repeat as necessary.
In hyperacidity and Sickness of Pregnancy:
one or two teaspoonfuls as required.

PACKS AND PRICES

TABLETS In Hygienic film strips of 6, in cartons
of 30 and dispensing packs of 504. Basic N.H.S.
cost 2/2d for 50 tablets.

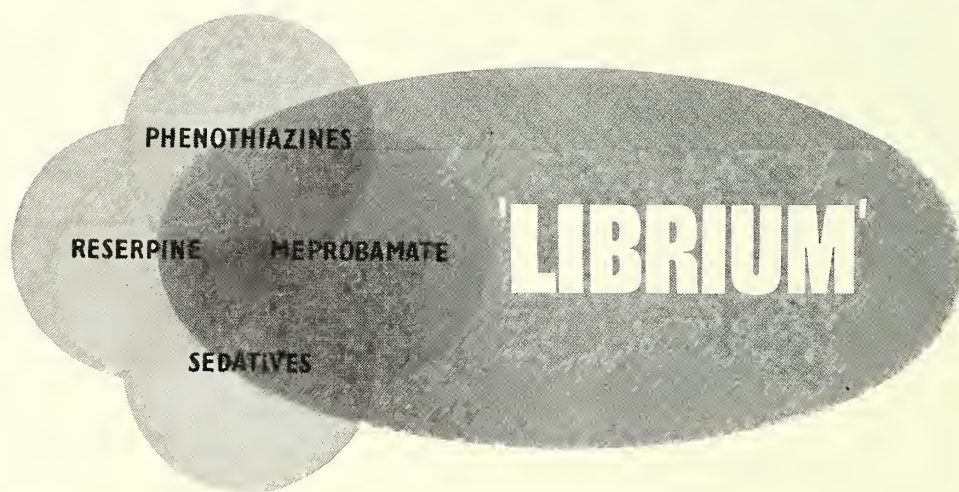
GEL 8 oz. and 80 oz. bottles. Basic N.H.S. cost 2/2d
8 oz. bottle.

PHILLIPS, SCOTT & TURNER LTD • 179 ACTON VALE • LONDON W.3

NEW 'LIBRIUM'

TRADE MARK

BRAND



The successor to the tranquillizers

ROCHE

Literature available from
ROCHE PRODUCTS LIMITED,
15 MANCHESTER SQUARE, LONDON, W.1

OR-LEM SOFT DRINKS FIXED RETAIL PRICES BEST VALUE FOR MONEY

Your customers will love the fresh, tangy taste of pure fruit in famous Or-Lem Squashes made with whole crushed oranges and lemons (also grapefruit, pineapple, lime juice cordial and lemon barley water). And you will save time and trouble because there is no bottle deposit and bottles are free.

Look at the range of products—
compare the prices and the quality!

PURE LEMON JUICE

2/- half size (chemist 20/- dozen)

3/3 family size (chemist 30/6 dozen)

D'LISHUS WHOLE ORANGE DRINK

2/6 bottle (chemist 23/6 dozen)

OTHER

D'LISHUS SQUASHES 2/6 Bottle
sold only by chemists (23/6 dozen)

BLACKCURRANT SYRUP

2/6 half size (chemist 23/6 dozen)

4/3 family size (chemist 40/- dozen)

OR-LEM SQUASHES (all flavours)

2/9 bottle (chemist 25/6 dozen)

write for price list or send name of wholesaler now



she'll be looking
for LAROLA on
your shelf!

The powerful advertising campaign recently launched for this product has certainly stimulated demand, and the excellence of the product will ensure repeat sales.

Make sure that YOU have your share of this market by displaying Larola prominently.

so stock up
NOW
and meet the
increasing
demand for



OR-LEM LIMITED, 77 MILLBROOK ROAD, SOUTHAMPTON.

MANUFACTURED BY M. BEETHAM AND SONS, LTD., CHELTENHAM, ENGLAND

GOLDEN LIMITED

Manufacturers of

L'Oreal Hair Beauty Products

announce the following price revisions
effective from Monday, 18th July 1960

TRESS

WAVE SET

Small Size

New Price Per Dozen 10/- plus tax

New Retail Selling Price 1/8 per bottle

The price per dozen and retail selling price of the large size Tress remain unaltered.

Trill

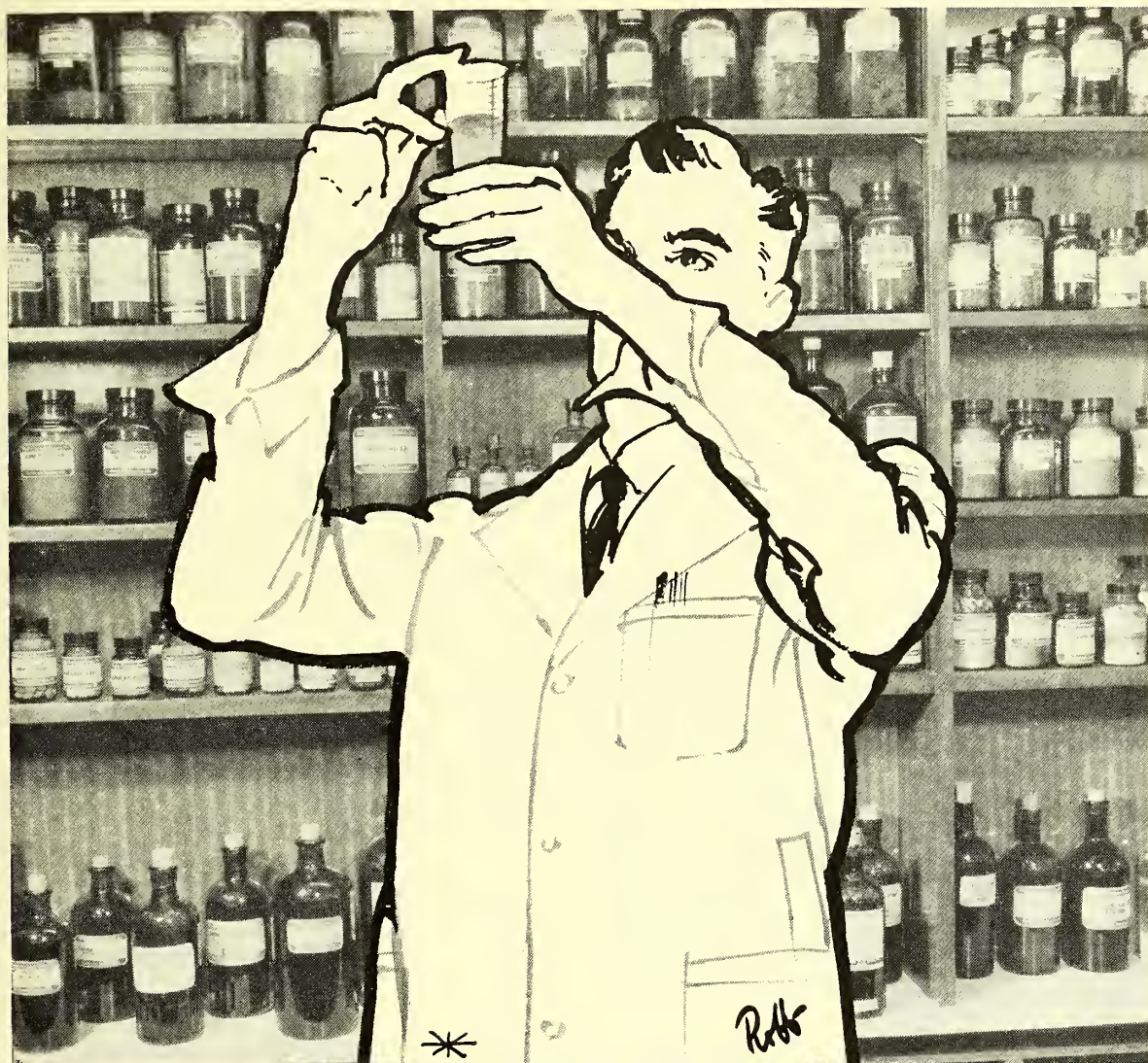
BRUSH-IN CONDITIONING CREAM

New Price Per Dozen 15/- plus tax

New Retail Selling Price 2/6 per tube

GOLDEN LIMITED

L'OREAL HOUSE, 7 GROSVENOR STREET, LONDON, W.1. HYDE PARK 1671.



BRI-NYLON

for the new-look work wear with the low-cost qualities

New and smarter styles in fast-dyed fabrics that are even more opaque—this is the news-of-the-season in BRI-NYLON work wear. BRI-NYLON overalls not only save money on a direct cost-for-life basis, but also reduce running costs, simplify laundering, increase efficiency and raise morale all round. BRI-NYLON is highly resistant to wear, tear, moisture, shrinkage, rot, flame, chemicals and insects. Please present your work wear problems to: British Nylon Spinners Limited, Marketing Department, 68 Knightsbridge, London, S.W.1.

* Registered Trade Mark of British Nylon Spinners Limited.

BRI-NYLON FOR THE BEST IN NYLON

ONLY GUAVIN
CONTAINS SUCH A
RICH NATURAL STORE
OF HEALTH-GIVING VITAMIN C
AND
ENERGY-GIVING FRUIT SUGARS



Guavin is 100% pure fruit juice; a delicious blend of the juices of South African guavas and sweet, black grapes. It contains more natural Vitamin C than blackcurrant syrups; more natural glucose than energy drinks.

It is sold exclusively through Chemists and Health Food Stores and at one price only—3/-.

To you, Guavin offers exclusively, the advantage of a stable price, steady, repeating profits, much goodwill—and a continuously expanding market.

It will pay you to stock Guavin. And to actively recommend it.

GUAVIN

(SAY GWAR-VIN)

the double goodness drink

3/-

PASCALL-KNIGHT LTD. (Est. 1931) CROYDON, SURREY

THE SAFEST
SEDATIVE
KNOWN...
NOW
ENLISTED
AGAINST

asthma

Control of asthma takes an important step forward with the introduction of 'Asmaval'. Here is a combination of ephedrine with the *non-barbituric* sedative, 'Distaval' (thalidomide). Not only is this sedative exceptionally safe but highly efficient; it does not give rise to respiratory depression and has a low incidence of allergic reactions. 'Asmaval' is, therefore, admirably suited for *routine* preventive use—even for the young asthmatic.

'Asmaval'
TRADE MARK

Each tablet contains:

Thalidomide ('Distaval') 12.5 mg.

Ephedrine hydrochloride 20 mg. (1/3 gr.)

DOSAGE: One or two tablets three times daily; appropriately less for children.

PACKS	TRADE PRICE	RETAIL PRICE
Tube of 25 tablets	2/-	3/-
Bottle of 100 tablets	6/-	9/-

DC(B/L)

THE DISTILLERS COMPANY (Biochemicals) LIMITED

Broadway House • The Broadway • Wimbledon • London • S.W.19
Telephone: LIBerty 6600

Owners of the trade marks 'Asmaval' and 'Distaval' PFH 32/60

This is the 'MODERN' baby

whose
modern
mother
insists on
'MODERN'
products



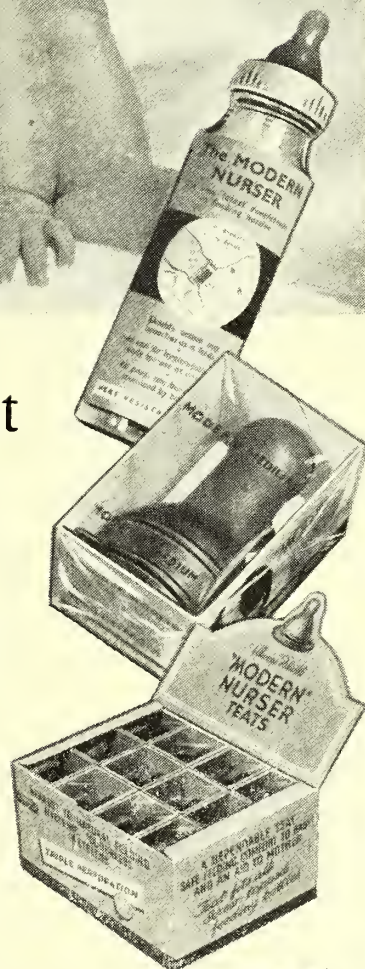
when she visits her chemist

Show 'MODERN' baby products and you'll sell 'MODERN' baby products. Every modern mother knows from recommendation and from the national advertising in press, women's magazines and television that 'Modern' teats by **CANNON** with triple perforation and 3 flow sizes are the nearest to natural feeding. Order NOW from your wholesaler and ensure supplies!

CANNON
'MODERN'

BRITAIN'S TOP-SELLING BABY PRODUCTS

MODERN TEATS · MODERN
NURSER TEATS · MODERN NURSERS
MODERN SOOTHERS · JUNIOR
SOOTHERS · EASIFLOW TEATS
BA-BY-BYT TEETHING RINGS
BABY COT · NOAH'S ARK AND
COTTAGE DOLL HOT WATER BOTTLES





EXTRA-TAIL *for HORSE or PONY!*

COMPLETE PROTECTION FROM FLIES AND OTHER INSECTS!

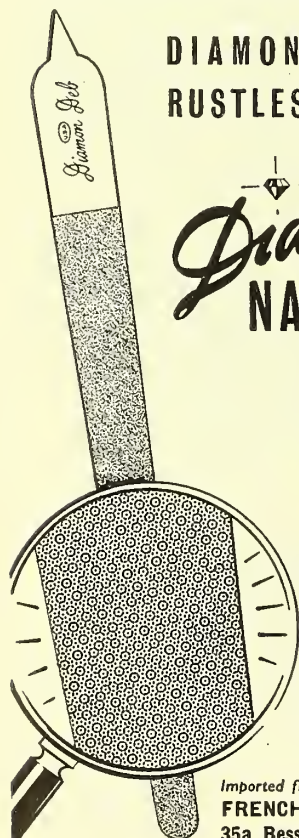
TRADE TERMS!
33 1/3%
CARR. PAID IN PACKS OF 12
FREE SHOWCARDS
FREE COUNTER LEAFLETS

At last, here is the perfect product for all who love their horses and have their well-being at heart. In the easy-to-apply aerosol pack, Extra-Tail is the complete answer to the sad sight of continuous tail-

swishing on a hot day. Just spray your animals' heads and backs for instant protection from flies and other insects—use it in the house, stables and byres too! This is the latest of the Kalium range of products and is one which we believe will be an immediate winner considering the likelihood of another hot Summer and the forecast that we are going to have trouble from wasps this year. Stable size 12 oz.—11/6. Pony size 6 oz.—6/6. Available from Saddlers, Riding Schools and Veterinary Chemists.

For full details please write to:—

KALIUM PRODUCTS (REDDITCH) LTD.
4 HILLS YARD, REDDITCH, WORCESTERSHIRE



**DIAMOND ENCRUSTED—
RUSTLESS, EVERLASTING**

Diamond Deb
NAIL DRESSER

Diamond and Sapphire crystals permanently embedded in pure Nickel make the finest manicure files in the world. Not affected by soaps, solvents, boiling liquids, or mild acids.

prevents

**NAIL SPLITTING
& NAIL PEELING**

Gem encrusted surface files so cleanly and smoothly that the nail layers cannot split and cause nail peeling.
4 in. 12/6 6 in. 15/- 8 in. 17/6

Imported from U.S.A. by:
FRENCH PERFUMERY CO. LTD.
35a Bessborough Place, S.W.1



CORKS

PRESCRIPTION BOTTLES

require top grade cork stoppers which permit no leakage.

Chemists, who know from experience, continually specify Robinson Corks—the first class quality never varies.

Write for full details and prices to:—



ROBINSON BROS

CORK GROWERS LTD.

21 HORTON STREET • HALIFAX
London Address: 54-62, Regent Street, London, W.1 Tel: GER 3965/8

VITAMIN D3

PURE CRYSTALLINE D3

o-Cresol-α-glycerol-ether
(Mephensin)
Guaiacol-α-glycerol-ether

Manufacturers:

PEBOC
LIMITED

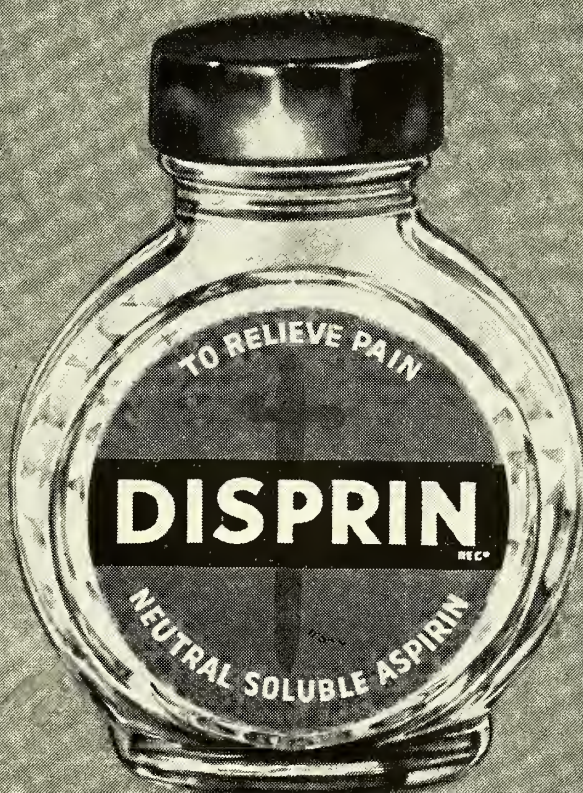
Sales Office: 629/630 TOWER BUILDING
LIVERPOOL 3 • ENGLAND

Laboratories: NORTHOLT, MIDDLESEX

MORE AND MORE DOCTORS
ARE RECOMMENDING SOLUBLE ASPIRIN...



SO YOU CAN EXPECT
A LARGER
DEMAND
FOR



To-day, the advantages of soluble aspirin are becoming more and more appreciated as the form of aspirin less likely to leave acid particles in the stomach.

In the soluble aspirin field, the brand your customers know is Disprin—the original soluble aspirin.

Disprin is an excellent, long-established product, and it is very well advertised through national TV and press.

So keep a good stock of Disprin—you can recommend and sell it with confidence.

RETAIL PRICES:-

Bottles of 26 tablets, 1/11; 50 tablets, 3/2. Foil packs of 8 tablets, 8½d.; 28 tablets, 1/11; 100 tablets, 5/4½. Disprin Junior (for children): Foil packs of 16 tablets, 8½d.; 48 tablets, 1/9 (each tablet providing an exactly measured dose).

ALWAYS CARRY A GOOD RANGE OF

INECTO

"hair magic"

PARTICULARLY THE
NEW REAL BLACK

Whatever shade of semi-permanent hair colouring a woman wants, she will find it among the 28 lovely colours of Hair Magic. So easy to apply, it cleanses and conditions the hair to gleaming silky softness as it colours.

THE NEW HAIR MAGIC REAL BLACK has been created to meet a growing popular demand. It gives a gleaming all-over black, perfectly even without streaks. Hair up to 50% grey is transformed in a few minutes.

INECTO *wins on a show of heads!*

The most experienced and largest manufacturers of hair colouring in the world.

Advice Bureau · INECTO HOUSE · 27 DOVER STREET · LONDON W1 · Telephone: HYDe Park 7541



No skin test

WHOLESALE
1/8 + P.T.

RETAILS AT
3/10

YOUR PROFIT
1/4

BOTANICALS
CHEMICALS
GUMS



ESSENTIAL OILS
SPICES
WAXES

★

CASCARA
NUX VOMICA
SENEGA
STYRAX
STROPHANTHUS

NEW YORK

HAMBURG

★

JOHN KELLYS (LONDON) LTD.

24 OLD BROAD STREET, E.C.2.

Telephone: LONdon Wall 6585 (4 lines)
Telegrams: "Ergotine, Stock, London"

ILODERM

*a unique self-sterile Ointment that compares with
no other in the treatment of:—*

BURNS •
BEDSORES •
IMPETIGO •
NAPKIN RASH •
DERMATITIS •
CRACKED NIPPLES •

ask your usual wholesale House for supplies

ILON LABORATORIES
LORNE STREET, HAMILTON, LANARKSHIRE

TELL ALL YOUR CUSTOMERS . . .

NOW YOU CAN PROJECT



METAL SLAT BAR

Keeps out dust, protects screen surface when stored, prevents rubbing and tearing.

FINER BEADED SURFACE

Finer beading minimises grain in projected image, and gives clear, sharp pictures.

METAL HANGER

Sturdy and practical design for added strength and rigidity. Screen leveller for uneven floors.

AUTO-LOCK

Permits full adjustability of height, and conversion from square screen for slides to oblong for movies.

BEAUTIFUL COLOURS

Distinctive colour combination used on slat bar, case and plastic parts for overall attractiveness.

ON AN

These new ALDIS screens are really amazing value!

They are beautifully made tripod screens, easily erected in a few moments. The screen surfaces are coated with fine glass beads for maximum light reflection, and the fine grain ensures good resolution and definition. The workmanship and finish is of very high quality.

Never before have such fine screens been available at such low prices.

Demonstrate the ALDIS screens—your customers will realise that it's what they've been wanting to complete their slide show enjoyment.

ALDIS SQUARE—40

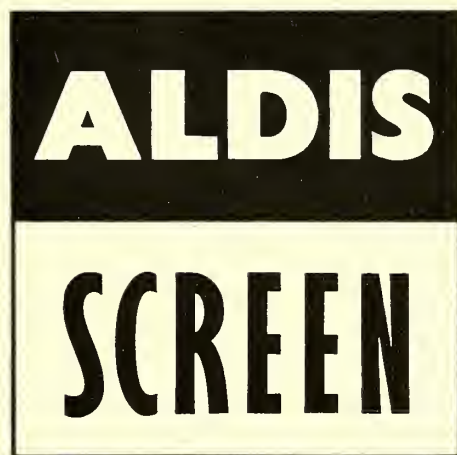
For average-size rooms. 2" x 2" slide projector with 8.5 cm. lens will fill the screen at 8ft. distance.

£5.19.6

ALDIS SQUARE—50

For larger rooms and small halls. 2" x 2" slide projector with 8.5 cm. lens will fill the screen at 10ft. 6ins. 10 cm. lens will fill the screen at 12ft. 6ins.

£7.19.6



Sole Wholesale Distributors:

**NEVILLE BROWN
& CO. LTD**

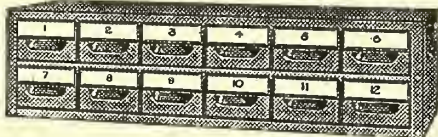
77 NEWMAN STREET, LONDON, W.1 Tel. LANGham 7161 (10 lines)

Trade Counter: 3 BERNERS MEWS, W.1 (rear of building)



12 DRAWER UNIT

12 Type 'A' Drawers. Available in any multiple of 6 drawers. 8" high by 36" wide by 11½" deep.

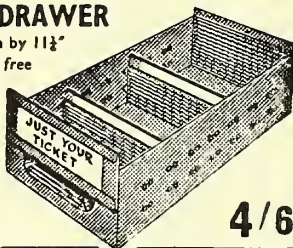


£4.15.0 DELIVERED FREE
In England, Scotland and Wales

TYPE 'A' DRAWER

5" wide by 3" high by 11½" long. With one free divider per drawer.

Extra dividers:
plain 6d. each.



4/6

N·C·BROWN LTD

SHELVING DIVISION, HEYWOOD, LANCs. PHONE :- 69018 (6 lines)

a
BEST-SELLER
ALL
the year
round



'NIAGARA'
VITAMIN 'C'
Blackcurrant Syrup

Niagara—made from Blackcurrant juice and sugar... rich in health giving Vitamin 'C'... delicious, the perfect drink for young and old alike.

ORDER FROM YOUR WHOLESALE NOW!

PROCESSED BY

BARNETT & FOSTER LTD

Queensbridge Road, London, E.8.

Tel: CLIssold 7132

AP.115

"RELIANCE" NATURAL SPONGES



Natural Deep Sea Sponges

To display a natural deep sea sponge is to sell it—because discriminating customers know that it is softer and kinder to the skin, and more lasting and more hygienic than any substitute—as well as holding three times as much water.

Cresswell's offer the best of the sponge crop. Please write for our price lists, and when in the West End of London a visit to make your own selection is welcomed.

CRESSWELL BROS. SPONGES

3-9, EARLHAM STREET, CAMBRIDGE CIRCUS, LONDON, W.C.2
TELEPHONE TEMple Bar 5331

TANNIC GALLIC PYROGALLIC

All qualities

**THE BRITISH DYEWOOD
CO LTD.**

GLASGOW

Johnson & Johnson's

DISPOSABLE

ABSORBENT UNDERPADS

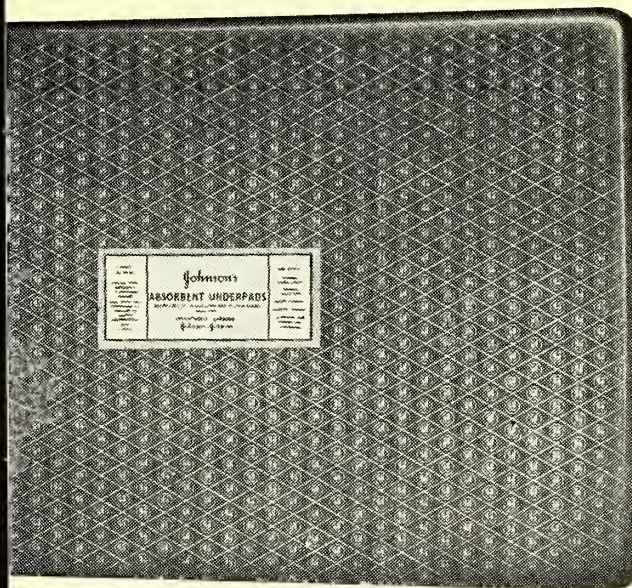
A high percentage of old people are, unfortunately, to some extent incontinent. As the average age of the population goes up, the number of old people suffering from incontinence increases every year. For you this means more and more sales of Johnson's ABSORBENT UNDERPADS.

For them it means extra comfort. For those who nurse them — less unpleasant and unnecessary work.

Johnson's ABSORBENT UNDERPADS prevent soiled sheets, save drudgery and cost.

TRADE PRICE:
6/6 per pkt. of 12

For the protection of bedding in cases of incontinence, in home nursing and confinements



Johnson & Johnson
(Gt. BRITAIN) LTD. SLOUGH



there's good business for you
with **Zoflora**
floral DISINFECTANT



YOU ARE SUPPORTED TO THE UTMOST—



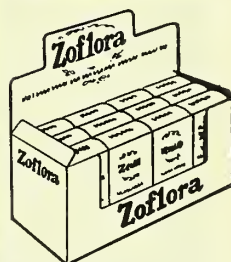
BY a lively sustained
National Advertising
Campaign in womens
magazines,
Reader's Digest
and National
Sunday Newspapers



BY a first class
well-known and well
presented product
that brings regular
repeat sales

AEROSOL 3/9 ZOFLORA 2/6

Free display material
available on request

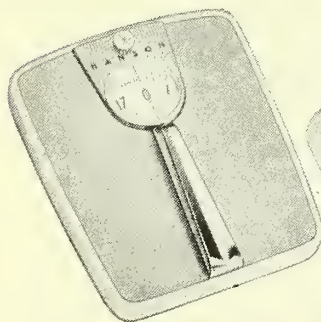


THORNTON AND ROSS LTD · HUDDERSFIELD

A Beautiful Gift

HANSON

Quality Scales since 1888
MADE IN U.S.A.



Model No. 600
White or black with gold trim

Can be hung
on the wall



Exclusive equaliser
bar mechanism
enables this scale
to weigh accurately
on carpeted or
uneven floors in
bedrooms or bath-
rooms. Oversize
dial you can
see and be sure.

75/6 Inc. Tax.

Other models from
56/9 Inc. Tax.

Obtainable from Selected Wholesalers or:-

LEONARD McEWEN LTD

28-36 ORSMAN ROAD, KINGSLAND ROAD, LONDON, N.1. Tel.: SH0reditch 7754

Importers of the World's best value in bedroom/bathroom scales



QUEEN

Non Irritant

BEAUTY PRODUCTS

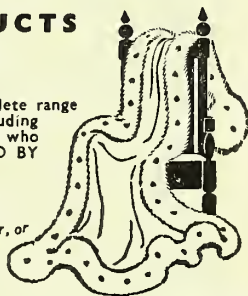
THE SAFETY FACTOR IN
EVERY DAY MAKE-UP

Queen beauty products form a complete range
of toilet and beauty preparations, including
lipsticks, specially for those women who
have sensitive skins. **RECOMMENDED BY
THE MEDICAL PROFESSION.**

New terms give 33 1/3% discount.

Obtainable from Messrs Sangers Ltd., and
Allied Companies, through your Wholesaler, or
direct from

BOUTALLS CHEMISTS LTD.,
60 Lambs Conduit St., London, W.C.1



60 Years'
Repute as
the Family
Remedy
for
Indigestion

P.A.T.A.
Retail Prices
1/7, 3/6,
5/7, 13/5, 24 3
(including
tax).

BOX'S

INDIGESTION PILLS
W. H. BOX, 47 COBBOURG ST., PLYMOUTH

big price reductions

ARE SELLING



faster than ever!

Improved production methods—plus—the most up-to-date processing have made it possible to reduce the prices of Gevacolor Negative Films, Developing and En-Prints

LOOK! Roll films: 120, 620 and 127 are reduced from 10/6 and 10/5 to 8/- (Inc. Tax) 35 mm. film is reduced from 12/7 to 10/- (Inc. Tax) Developing roll films from 6/6 to 6/- Developing 35 mm. films from 7/6 to 6/- En-prints are reduced from 2/9 to 2/-

ORDERS FOR DEVELOPING AND EN-PRINTS at these prices MUST be sent to one of the following:—

HAMILTON TAIT LTD., Colour Processing Laboratory, Penicuik, Midlothian (Tel. Penicuik 474)

NORFOLK COLOUR LABORATORIES (E. E. Swain Ltd.), 58 Westgate, Hunstanton, Norfolk (Tel. Hunstanton 277).

NORTHERN ASSOCIATED PHOTOFINISHERS LTD., Napcolor Laboratories, Rose Grove, Ardwick, Manchester 12 (Tel. Ardwick 3412)

RANK-TEMPO LABORATORIES LTD., Cumberland Avenue, Park Royal, London, N.W.10 (ELGar 1161)

ALL THIS . . . AND



QUALITY TOO!

GEVAERT LIMITED, GREAT WEST ROAD, BRENTFORD, MIDDLESEX. PHONE ISLEWORTH 2131

GOYA

gives the **GOLDEN** touch



to BEAUTY PUFF SALES

new!

A jeweller-designed case in golden metal, delicately engraved to make Beauty Puff the most exciting, expensive-looking make-up today.

There isn't a woman born who won't fall for BEAUTY PUFF in the new golden compact.

new, too!

A price that makes the new golden compact very, very attractive — 8/6, complete with puff and mirror. (Refills 2/6).

**a new
cocktail compact!**

Goya has redesigned the cocktail compact in pearl, filigreed in gold. It's complete with puff AND MIRROR, and excitingly, only 4/6. (Refills 2/6).

greater than ever

... more, more advertising for New Beauty Puff; advertising that will make every woman long for these two glamour-compacts. It's brilliant, colourful, different, appearing week after week in every major woman's magazine supported by large spaces in the Daily Mirror. BEAUTY PUFF in golden or pearl compacts.



are you sure you'll have enough?

NEW GOYA BEAUTY PUFF for today's cool 'n' confident look!



Enterofagos

POLYVALENT INTESTINAL BACTERIOPHAGE

INDICATIONS

With ENTEROFAGOS most cases of **Diarrhoea** respond rapidly to treatment. **Colitis, Enteritis, Enterocolitis, Typhoid and Paratyphoid Fevers, Bacillary Dysentery, B. Coli Infections, Food Poisoning** are equally responsive to its treatment.

*The **BIOLOGICAL** treatment for most intestinal, para-intestinal, kidney and bladder infections*

ENTEROFAGOS is one of a series of M.B.L. preparations which enjoy the confidence of the Medical profession in this country and overseas. It is of established therapeutic value in the treatment of infective conditions of the gastrointestinal tract, kidneys and bladder.

ENTEROFAGOS contains the active bacteriophages against Staphylococci, Streptococci, B. coli, B. Typhosus, B. paratyphosus, B. dysenteriae and Enterococci. It can be given to adults or children without fear of harmful reactions, and this combination of efficacy and safety makes ENTEROFAGOS the ideal treatment for the infective conditions indicated.

The preparation is contained in ampoules to be taken orally according to the instructions supplied.

MEDICO-BIOLOGICAL LABORATORIES LIMITED
CARGREEN ROAD, SOUTH NORWOOD, S.E.25

P B29

The Best costs no more!

when ordering ZINC OXIDE
insist on—

FELLING
ZINC OXIDE B.P.

AND GET THE
Highest Standard of Purity

WHOLESALE ONLY SUPPLIED
ENGLISH MANUFACTURE
USED THROUGHOUT THE WORLD

Guaranteed free from lead and arsenic. Its manufacture is supervised throughout by qualified chemists. Each particle size will pass 240 mesh with less than 0.1% residue.

We supply most Wholesalers, but should you have difficulty please contact

H. LATTIMER 17 THE RISE, EWELL, EPSOM

Telephone : EWELL 4940

Manufactured by FELLING ZINC OXIDE CO., LTD.

ILOX EYE LOTION

Recommend it with
assurance—for Eye Strain, Tired
Eyes, Inflammation, etc.

Retails at
3/- per bottle
(including eye bath)
Cost Price 21/- per doz.
plus 5/2 P.T.

LARGE SIZE 10 ozs: **4/-** per bottle
Cost Price 28/- per doz.
plus 7/- P.T.

ILOX EYE BATHS
Cost per doz. 10/- plus 1/6 P.T.
Retail 1/4 each.

BONUS OFFER
1 DOZEN PARCEL
13 to the dozen
ATTRACTIVE SHOW-CARD
IS ALSO AVAILABLE
from the London Distributors



Prepared by

B. HOOPER & CO. LTD. Chemists
6 Railway Place · Fenchurch Street · London · E.C.3. Roy 2380

London Distributors:

PORTLAND SUPPLY CO., STONEY LANE, E.C.3. BIS 5274

Another sales success follows **HE-TAN!**

NEW!

the first tanning cream
on the market, created
specially for women....



She-Tan

LIQUID TANNING CREAM

gives a lasting, natural even tan without the sun!

PROFITABLE LAUNCHING BONUS

12 units for the price of 11

She-Tan sells like sunshine . . . and you get over 65/- **REAL PROFIT** on every dozen. Your free bottle is really **FREE**—no purchase tax is charged on it.

BIG ADVERTISING LAUNCH STARTS JULY

$\frac{1}{2}$ page advertisements in Sunday Pictorial, Woman's Mirror, Woman's Realm, Date, True Story, True Romance, Honey, Woman & Beauty will be sending new customers your way!

COUNTER DISPLAY

Your first bonus order will come with this gay, sales-compelling display crowner to help you **SELL**.

She-Tan

SHE-TAN is a white, emulsified cream which, when applied to the skin, spreads easily and evenly producing an attractive bronze appearance within three hours . . . without the sun . . . even on fair skins! It is entirely harmless, contains no irritants, no iodine. It is not a stain or a dye, will not wash off the skin.

NORMAL TERMS FOR SHE-TAN:

Trade price	105/- per dozen
Purchase Tax	52/6 per dozen
Public Price	17/6 per bottle (incl. tax)

Order **NOW** from sole distributors at **Bonus Terms**. Bonus offer closes 31 July, 1960.

FASSETT & JOHNSON LTD.

86, Clerkenwell Road, London, E.C.1
and 139, Bath St., Glasgow, C.2.

for **ASTHMA** and Allied Chest Complaints, you can safely recommend —

RIDDOVYDRIN ASTHMA INHALANT

—A BIOLOGICAL PREPARATION CONTAINING VITAMIN C

RIDDOVYDRIN gives Rapid and Prolonged Relief to the most Chronic Cases.

SAMPLES AND LITERATURE FREE ON REQUEST

TOGETHER WITH

RIDDOPAG PLASTIC INHALER

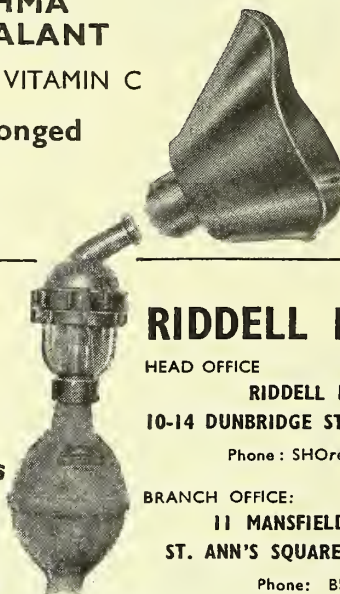
WITH OR WITHOUT MASK

— UNBREAKABLE —

Gives a Fine Dry Vapour Free of Drops

MAY BE SUPPLIED ON E.C.10 FORMS

40°/° DISCOUNT ALLOWED ON ALL INHALERS
RETAILING FROM 9/6d. TO 58/6 TAX FREE



RIDDELL PRODUCTS LTD.

HEAD OFFICE

RIDDELL HOUSE,

10-14 DUNBRIDGE STREET, LONDON, E.2

Phone: SHoreditch 7254/6

BRANCH OFFICE:

11 MANSFIELD CHAMBERS,

ST. ANN'S SQUARE, MANCHESTER, 2

Phone: BLA. 2894

Pharmaceutical Emulsions and Emulsifying Agents

By L. M. Spalton, B.Pharm., M.P.S.

Bound in cloth and fully indexed

TODAY, the pharmacist is faced with an almost bewildering assortment of emulsifying agents, all having varying properties and requiring different methods of treatment. In this book the considerable range of these products has been classified, together with essential practical points about their pharmaceutical use. It contains chapters devoted to the theory of the formation of emulsions, properties of different emulsifying agents (classified into groups according to their structure and characteristics), the formulation and preparation of emulsions, the general methods of preparing emulsions with details of technique and causes of emulsion separation, preservation and storage of emulsion, etc. The practical uses of emulsifiers is dealt with at considerable length, together with methods of handling each type of emulsifying agent and full notes of incompatibilities and other matters. The book also contains a classified index of over 300 emulsifying agents with reference to their composition, type and uses, together with an index of manufacturers.

★ Every Pharmacist should possess a copy 9/- postage 8d.

Order through your bookseller or direct from the Publisher:—

The
CHEMIST AND DRUGGIST

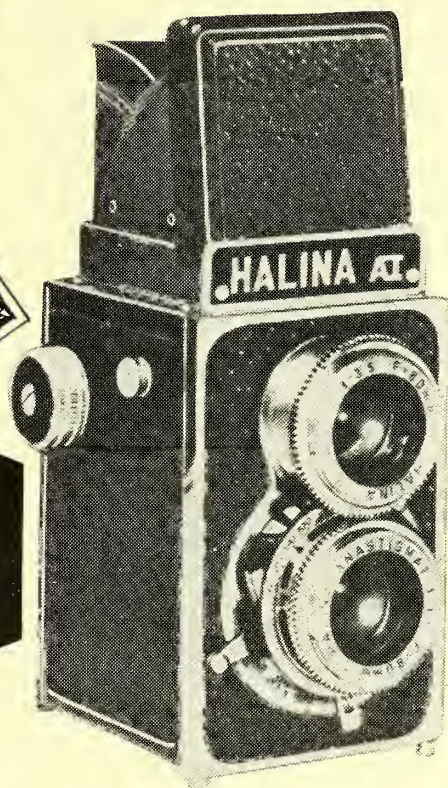
28 ESSEX STREET, STRAND, LONDON, W.C.2

TWO cameras in ONE



2 1/4 SQUARE

12 exposures size 2 1/4 x 2 1/4 on 120 film for the finest enlargements or colour transparencies.



35 MM

24 exposures size 24mm. x 36mm. Superb colour transparencies at approximately 25% cheaper than the standard perforated 35mm. film.

Halina AI

TWIN LENS REFLEX

ONLY

£10.10.0

COMPLETE WITH 35mm. CONVERSION UNIT
LEATHER EVER-READY CASE £2.7.0

- ★ Halina Anastigmat f/3.5/80 mm. hard coated, colour corrected lens.
- ★ Halina f/3.5/80 mm. hard coated, matched viewing lens.
- ★ Four speed shutter 1/25th, 1/50th, 1/100th and B.
- ★ Ground glass focussing/viewing screen.
- ★ Coupled front lens focussing.

- ★ The self-erecting reflex hood houses a large built-in magnifier.
- ★ Synchronized for flash.
- ★ Trigger shutter release.
- ★ All metal body with chrome trim.
- ★ Depth of field scale.
- ★ Safety camera back lock.
- ★ Tripod bush.
- ★ Easy loading.



J. J. SILBER LTD., 40-46 LAMB'S CONDUIT ST., LONDON, W.C.1 HOL 4214/56 CHA 2237-3596


The CHEMIST AND DRUGGIST
CLASSIFIED ADVERTISEMENTS

Telephone: CENTRAL 6565

Address Box Number Replies to: THE CHEMIST AND DRUGGIST, 28 ESSEX ST., STRAND, LONDON W.C.2

Specially spaced Advertisements, including:—Public and Legal Notices, Sale by Auction, Appointments, Contract Work, Patents, Partnerships, 20/- per 1/4 inch minimum and pro rata, Box 2/-, Clearances and Wants, Businesses for Disposal and Wanted, Premises, Agents Wanted, Agencies Wanted, Miscellaneous, 20/- for 36 words minimum; then 6d. per word, Box 2/-, Situations Vacant, 15/- for 36 words minimum, then 6d. per word, Box 2/-, Situations Wanted, 3/- for 18 words minimum then 3d. per word, Box 1/-, Specially displayed advertisements with rule all round, 50/- per inch minimum.

ORRIDGE & COMPANY

184 STRAND, W.C.2
Tel: TEMple Bar 9212/3 & 6340

CHEMIST BUSINESS TRANSFER AGENTS AND VALUERS WHOLESALE AND RETAIL
BRANCHES: BIRMINGHAM · SOUTHAMPTON · LIVERPOOL · SHEFFIELD · CARDIFF

PREMISES TO LET

**ELLESMERE PORT,
CHESHIRE**

New Town Shopping Centre
45 Shops 6 Stores

**Only 6 Shops
and 1 Department Store
now available for letting**

Full details from Sole Agents:

BLAKE & CO.,
103 Mount Street, London, W.1
Grosvenor 3761 (6 lines)

C 5658

PREMISES WANTED

OPHTHALMIC OPTICIAN wants consulting room to rent above pharmacist or doctor, London or East Middlesex. Established practice an asset, but not essential. Advertiser is young practitioner wanting to set up branch practice. Details in confidence. Box C 3076.

BUSINESSES FOR DISPOSAL

CROYDON, NEAR. Population about 20,000. Corner shop, good living as either drug store or pharmacy. Turnover about £4,000 p.a. Scope for increase. Modern fixtures. Very attractive accommodation, garden, etc. Seven-year lease at £400 p.a. with option. Price to include goodwill, lease and tenant's fixtures in shop and living accommodation, £1,000, plus small stock at valuation. Apply: Orridge & Co., 184 Strand, W.C.2, quoting Ref. 4451. C 5648

APPOINTMENTS

**BURTON-ON-TRENT HOSPITAL
MANAGEMENT COMMITTEE,
ST. MATTHEW'S HOSPITAL,
BURNTWOOD, LICHFIELD**

Locum Assistant-in-Dispensing
required on 22nd August for two weeks. Whitley Council rate of pay.
Applications to S. D. Evans, Group Secretary, General Hospital, Burton-on-Trent. C 5663

**BLACK NOTLEY HOSPITAL,
BRAINTREE, ESSEX**

Assistant-in-Dispensing
(Locum) required immediately. Resident or non-resident. Possibility of permanency at a later date. National Health Service Salary Scale and Conditions.
Applications to Hospital Secretary from whom further details can be obtained. C 5622

**BURTON-ON-TRENT HOSPITAL
MANAGEMENT COMMITTEE,
ST. MATTHEW'S HOSPITAL,
BURNTWOOD, LICHFIELD**

(1,300 Psychiatric Beds)
Chief Pharmacist (Category II)
Applications are invited for the above post. Whitley Council rates of pay and conditions of service.
Full particulars and names of two referees to Group Secretary, General Hospital, Burton-on-Trent. C 5662

**BUCKLAND HOSPITAL,
UNION ROAD,
DOVER**

Senior Pharmacist
Applications are invited for the appointment of Senior Pharmacist at the Dover Group of Hospitals.
Salary £770 a year rising by one annual increment of £30 to £800 a year by six annual increments to a maximum of £1,010 a year.
Applications stating age, qualifications and experience, together with the names and addresses of two referees, should be made to the Hospital Secretary by not later than 14 days after the appearance of this advertisement. C 5637

**BURTON-ON-TRENT HOSPITAL
MANAGEMENT COMMITTEE,
BURTON-ON-TRENT
GENERAL HOSPITAL
(251 Beds)**

Senior Pharmacist or Pharmacist
required. Whitley Council rates of pay and conditions of service. Accommodation may be available.
Applications, with two referees, to S. D. Evans, Group Secretary. C 5661

**CENTRAL GROUP HOSPITAL
MANAGEMENT COMMITTEE**

Locum Pharmacists
Salary 18 guineas a week. Vacancies:—
11th to 16th July 1960,
12th to 24th Sept. 1960.
Apply to Chief Pharmacist, Bethnal Green Hospital, Cambridge Heath Road, London, E.2. C 523

**HILL END HOSPITAL,
ST. ALBANS, HERTS**

Dispensing Assistant
required at above Hospital 20 miles from London on frequent Green Line coach service. Commencing salary according to age and experience rising to a maximum of £535 per annum plus £50 per annum for possession of the Apothecaries' Hall Certificate. Apply with details of experience, naming two referees, to the Hospital Secretary. C 541

**HOSPITALS FOR DISEASES
OF THE CHEST**

Senior Pharmacist
Applications are invited for the post of Senior Pharmacist at THE LONDON CHEST HOSPITAL. Salary in accordance with Whitley Council scales. Applications, stating age, qualifications and experience, accompanied by two testimonials, to the House Governor, London Chest Hospital, E.2. C 5625

**HOSPITALS FOR DISEASES
OF THE CHEST**

Locum Senior Pharmacist
required at The London Chest Hospital for three weeks from August 20, 1960, with possible extension. Applications to the House Governor, London Chest Hospital, E.2. C 5667

ERNEST J. GEORGE & CO.

329 HIGH HOLBORN, LONDON W.C.1.

Telephone: HOLBORN 7406/7

*Professional Valuers to the Pharmaceutical Trade.— Wholesale. Retail and
Hospital Stocks. Branches throughout England and Scotland.*

Appointments—Continued**HILL END HOSPITAL,
ST. ALBANS, HERTS****Locum Tenens Chief Pharmacist**

required for period up to three weeks as soon as possible. Salary £18 18s. per week. Applications stating age, qualifications, experience and naming two referees to the Chief Pharmacist. C 548

**KING EDWARD VII HOSPITAL,
WINDSOR****Assistant-in-Dispensing**

required. Applications to Secretary. C 5647

**LONDON HOSPITAL,
WHITECHAPEL, E.1****Pharmacist**

required—Salary £690—£920 according to previous experience and service. Applications to House Governor. C 522

**KING EDWARD VII HOSPITAL,
WINDSOR****Pharmacist**

required. Commencing salary £690—£815 p.a. according to experience. Late Clinics up to six hours per week at 12/6 per hour. Newly qualified Pharmacist welcomed. Applications with two referees to Secretary. C 5646

**METROPOLITAN HOSPITAL,
KINGSLAND ROAD,
LONDON, E.8****Locum Pharmacist**

required. Modern Department. Salary 18 gns. per week. Applications with details of age, training and experience to the Hospital Secretary. C 529

**NEASDEN HOSPITAL,
BRENTFIELD ROAD,
N.W.10****Pharmacist (Full-time)**

Applications are invited for the above post, basic grade. To commence duties as soon as possible. Applications to Hospital Secretary. C 540

**NORTH WIRRAL HOSPITAL
MANAGEMENT COMMITTEE,
VICTORIA CENTRAL HOSPITAL,
LISCARD ROAD, WALLASEY****Senior Pharmacist (Full-time)**

Post vacant 1st August, 1960. Salary Scale and Conditions of Service in accordance with Whitley Council. Applications, with names and addresses of two referees, to Administrative Officer. C 5619

**QUEEN MARY'S HOSPITAL
FOR CHILDREN,
CARSHALTON, SURREY****Assistant-in-Dispensing**

with approved qualifications required for general dispensing at the above hospital. Salary according to Whitley Council scales, plus London Weighting.

Applications, stating age and experience together with the names and addresses of two referees, to the Group Secretary. C 546

**ROYAL GWENT HOSPITAL,
NEWPORT, MON
(264 Beds)****Assistant-in-Dispensing**

required (Apothecaries' Hall). Salary according to age from £275 at 18, £305 19, £340 20, £380 21, 22 or over £445, rising to £585. The Department has a complement of three pharmacists and four dispensers. Write quoting two referees to T. A. Jones, Group Secretary, 64 Cardiff Road, Newport. C 5657

**SHREWSBURY HOSPITAL
GROUP****Assistant-in-Dispensing**

for duties at the Royal Salop Infirmary, Shrewsbury, and other Group Hospitals. Whitley Council scales. Apply in writing to Group Secretary, Copthorne Hospital, Shrewsbury. C 5567

**SEAMEN'S HOSPITALS
MANAGEMENT COMMITTEE****Pharmacist**

required for duties under Chief Pharmacist at Dreadnought Hospital, Greenwich. Salary and conditions of service in accordance with Whitley Council regulations. Applications stating age, qualifications and experience, together with the names and addresses of two referees, to be sent to the Group Secretary, Dreadnought Seamen's Hospital, Greenwich, S.E.10. C 550

**SHREWSBURY HOSPITAL
GROUP****Pharmacist**

for duties at the Royal Salop Infirmary, Shrewsbury, and other Group Hospitals. Vacancy for post-graduate apprentice at the Royal Salop Infirmary. Whitley Council scales. Apply in writing to Group Secretary, Copthorne Hospital, Shrewsbury. C 5565

**WESTMINSTER HOSPITAL,
S.W.1****Locum Pharmacist**

required to cover Summer Vacation period. 18 guineas per week. Details from Chief Pharmacist. C 545

**SHREWSBURY HOSPITAL
GROUP,
SHELTON HOSPITAL (MENTAL),
SHREWSBURY****Chief Pharmacist**

Applications are invited from suitably qualified ladies and gentlemen for the post of Chief Pharmacist, single handed, at the Shelton Mental Hospital, House available.

Salary: £815 x £35 (5) x £40 (3) to £1,110. Conditions of service as prescribed by the Pharmaceutical Council of the Whitley Council. Annual leave 21 days plus all Bank Holidays. The appointment will be subject to the provisions of the National Health Service (Superannuation) Regulations.

Applications, with names and addresses of three referees, should be addressed to the Medical Superintendent, Shelton Hospital, Shrewsbury.

J. P. MALLETT,
Group Secretary. C 5623

**WEST PARK HOSPITAL,
EPSOM, SURREY****Assistant-in-Dispensing**

(with Apothecaries' Hall Certificate) required in active psychiatric hospital. Salary and conditions of service in accordance with National Health Service Regulations.

Applications with the names of two referees should be sent as soon as possible to the Group Secretary, who will be pleased to provide further information on request. C 539

**YORK "A" AND TADCASTER
HOSPITAL MANAGEMENT
COMMITTEE,
CITY HOSPITAL,
HAXBY ROAD, YORK****Post-graduate Pharmaceutical Students**

required for duty at the above Hospital, commencing September 1960. Whitley Council conditions of service, salary £400 per annum. Applications giving details of age, education, qualifications and names of two referees to Hospital Secretary. C 5502

EDUCATIONAL**NORTHAMPTON COLLEGE OF
ADVANCED TECHNOLOGY
LONDON,****ST. JOHN STREET,
LONDON, E.C.1***Department of Ophthalmic Optics*

Applications are invited for the posts of Lecturer and Assistant Lecturer.

Candidates should have a good professional ophthalmic qualification, or a degree, or degree equivalent, in Biology, Physiology, Psychology or Pharmacology.

Facilities are available for research. Staff may also be expected to supervise students' research projects.

Salary scales:

(i) Lecturer: £1,400 x £35 to £1,600 per annum.

(ii) Assistant Lecturer: Graduate, £850 x £27 10s. to £1,300 per annum. Additional £75 for good honours degree. Commencing salary supplemented for appropriate professional or teaching experience.

Forms and further particulars from Secretary at above address. C 5649

SITUATIONS VACANT**RETAIL (HOME)**

MANAGER required by private concern to take complete charge of pleasant shop in Headingley district of Leeds. Good house attached. Salary and Commission £950 p.a. Alternatively, sale would be considered, turn-over £8,000. Full details to Adgie, Roberts & Co., 26 Park Row, Leeds, 1. C 3050

MANAGER OR MANAGERESS required by the Great Yarmouth Co-operative Chemists, Ltd., at their branch pharmacy with unopposed trading on housing estate, normal hours, 9 a.m. 6 p.m., rota 1 in 7. Good staff, transferable superannuation scheme, assisted accommodation available now. Salary by arrangement. Full particulars, please, to Superintendent Chemist, 28 Middle Market Road, Great Yarmouth, Norfolk. C 5668

OLDHAM CO-OPERATIVE CHEMISTS, LTD., invite applications for the position of pharmacy branch manager, either sex. Modern accommodation available if necessary. Superannuation, Salary and other emoluments at least £960. Applications giving age, experience, etc., to Oldham Co-operative Chemists, Ltd., King Street, Oldham. C 454

RETAIL (OVERSEAS)

EXPERIENCED sales assistant, woman 25-45 years, needed for cosmetic department in shop for families of H.M. Forces in Germany. Resident post. Free passage and uniform. Four weeks holiday a year. Applications to:—Secretary, Forces Work, Y.M.C.A., 108 Baker Street, London, W.1. C 5626

WHOLESALE

A **KEEN** medical representative required for South London and adjacent territory by newly-formed ethical division. Pharmaceutical or medical background or previous propaganda experience desirable. Resident in or near South London essential. Good commencing salary based on experience. Full expenses paid. Car provided. Contributory life and pension scheme available. Write full details to Box C 5643.

Situations Vacant—Continued

AYRTON, SAUNDERS & CO., LTD., require a Pharmacist with good experience as Manager of their Tablet Manufacturing Dept. This is a well-equipped expanding department and there is good supporting personnel. Apply in writing giving full details to: Works Director, 34 Hanover St., Liverpool, 1. C 5633

EXCEPTIONAL OPPORTUNITY occurs. Old-established well-known Midlands wholesale distributors require the services of an experienced photographic representative. Preferably with some knowledge of health lamps and electric equipment. Permanent superannuated position. Replies in confidence, Box C 5666.

FIRST-CLASS OPPORTUNITY for representative, South and East Midlands (East Anglia, Leics, Northants, Notts, S. Lincs, Cambs). A leading firm of manufacturing chemists marketing advertised proprietary products and range of pharmaceuticals require representative to maintain and develop an established connection. Remuneration £950 rising to £1,250 according to ability. Adequate expenses. Superannuated. Car provided. Apply giving full particulars, etc., to Sales Manager, Box C 5660.

LEDA PHARMACEUTICAL DIVISION of **F. W. BERK & CO., LTD.**, require representatives with medical background and successful sales record to extend unique range of ethical products. Opportunities for promotion in rapidly expanding organisation in these early stages of development with famous British company. Write full details in confidence to Sales Manager, Leda Pharmaceutical Division, Berk House, Baker Street, London, W.1. C 5645

MEDICAL REPRESENTATIVES required for provincial territories. Candidates aged 25/35 should have had previous experience of medical propaganda or alternatively possess suitable technical knowledge. There is a contributory pension fund. Company's car provided. Holiday arrangements honoured. Applications in own handwriting giving full details of previous experience, age, etc., should be addressed to Pharmaceutical Manager, Reckitt & Sons, Ltd., Hull, Yorkshire. C 5642

REPRESENTATIVE. Nationally known manufacturing company have vacancies for experienced representatives in the following areas:— 1. Manchester and the eastern part of Lancashire; 2. South Yorks, North Staffs, Derbys, Notts and Lincolnshire. 3. East Anglia and E. London postal districts. Remuneration by salary, commission and expenses, car allowance, superannuation. Existing live connection handed over to suitable applicant who must reside in the territory and be a car owner. Experience in calling on Wholesale and Retail Chemists, Hardware Dealers an advantage. Applications in writing to Sales Manager, Box C 5629.

REPRESENTATIVES required by nationally well known toilet company for central and north London territories. Only first-class men need apply. Good salary, commission and expenses, car owners preferred, Box C 5610.

REPRESENTATIVES. You can now add at least £6 weekly to your income for very little spare-time effort by introducing the world-famous "All-in-One" self-checking business account book, adaptable to all trades (published 40 years). Particulars from Account Books, Ltd., 379 High Road, Chiswick, London. C 3036

SEASONAL POSTS will shortly be available for Growers' Representatives and Assistant Chemists at sugar beet factories during the forthcoming season normally from about mid-September until about mid-January. Applicants should possess qualifications in chemistry and particularly in sugar analysis. Basic salaries £13 2s. 6d. and £10 10s. respectively, plus £10 end of season bonus. Increased scales offered to persons re-engaged for successive seasons. Applications, giving age, qualifications and experience, should be submitted to the General Secretary, National Farmers' Union, Agriculture House, Knightsbridge, S.W.1. C 5639

**BURROUGHS WELLCOME & CO.**

Do you enjoy writing?

We need a copywriter for the Veterinary Sales Department.

The preparation of technical circulars, advertisements and instructions, the maintenance of close liaison with publicity and the distribution of information, are all part of the interesting job of keeping our customers informed.

If you have a sound pharmaceutical background plus creative ability, apply to: The Personnel Officer, The Wellcome Foundation Limited, 183-193 Euston Road, London, N.W.1.

C 5634

SUPERVISOR. Nationally known manufacturing company requires the services of a thoroughly experienced representative to undertake the responsibilities of a Field Supervisor with a small sales force. Qualities required are proved selling ability with the ability to teach, train and co-ordinate the activities of representatives. Some experience in Sales Administration would be an advantage. Remuneration is by salary and expenses. A car allowance is made and this staff position is superannuated. Knowledge of both Wholesale and Retail Chemist, Hardware, Fancy Goods and Department Store trade an advantage. Applications in writing giving details of past experience to Managing Director, Box C 5630.

TABLET GRANULATOR, experienced required. Good wages and conditions. Holiday honoured. No Saturdays. Write, call or phone Mark Morris, Pharmacal Supplies, Ltd., Green Lane, Hounslow, Phone: Hounslow 8615. C 543

WHOLESALE (OVERSEAS)

PHARMACIST REQUIRED FOR GHANA, initially as an assistant branch manager to join a wholesaling and agency business dealing in a wide range of pharmaceutical products, etc. The organisation is a rapidly expanding one and there are excellent prospects of promotion for a man who, besides the necessary professional knowledge, possesses initiative and drive, and displays management ability early on in his career with the company, preferred age 25-33 years. Commencing salary dependent upon experience and suitability but not less than £1,400 per annum for a newly qualified man. In addition there are generous family allowances paid, plus an initial outfit allowance of £100. The company provides free, fully furnished accommodation in Africa for the employee and his family, and there is a good pension scheme in existence. Those interested in this appointment should write immediately giving full personal details to Box C 5628. Interview London.

YOUNG MAN with initiative and energy required as **Representative** calling on chemists. Must be resident in the Liverpool area. Write stating experience, whether car owner, age, etc., to Sales Manager, Or-Lem Ltd., Millbrook Road, Southampton. C 5641

WHOLESALE chemists in Liverpool area require an assistant manager for their proprietaries department. Must be fully conversant with the trade, experienced in stock keeping and buying and possess organising ability. Apply stating age, full details of experience and salary required to Box C 5659.

YOUNG MAN with initiative and energy required as **Representative** calling on chemists. Must be resident in the Birmingham area. Write stating experience, whether car owner, age, etc., to Sales Manager, Or-Lem Ltd., Millbrook Road, Southampton. C 5641

SPECIAL REPRESENTATION

MEDICAL speciality representatives whose incomes are restricted should apply to: Colin Myers, 10 Haymarket, London, S.W.1. Tel.: TRA. 7811. Salary plus commission. Earnings potential £4,000 and above. Pension scheme. Intensive training. Married men with college or university background and business experience, resident Greater London. C 3044

AGENTS WANTED

FIRST-CLASS AGENTS required for the following areas: West and South-west England, Wales, Midlands, North-east England, Essex, Kent and Sussex by progressive cosmetic company with fast-selling popular lines on the national market. Good retail connection an advantage. Generous commission on both retail and wholesale trading. Reply immediately with full details. Box C 5609.

SOLE AGENTS for London and Home Counties and Midland Counties to develop sales of well-known proprietary. Superbly presented quick seller with permanent all-the-year repeats. No competition and untaxed. Liberal commission on all business from the territories. Box C 3072.

YOUNG MAN with initiative and energy required as **Representative** calling on chemists. Must be resident in the Manchester area. Write stating experience, whether car owner, age, etc., to Sales Manager, Or-Lem Ltd., Millbrook Road, Southampton. C 5641

WILLIAM R. WARNER & CO. LTD.**MEDICAL REPRESENTATIVES**

As a result of rapid growth and re-organisation, William R. Warner and Co. Ltd. have a number of interesting vacancies for Medical Representatives.

Applications are invited from men aged 25-35 who wish either to make or consolidate a career for themselves in the Pharmaceutical Industry. For some appointments, pharmaceutical or equivalent qualification is an advantage, but applicants with a good technical background will be considered.

Those candidates who are short-listed will be interviewed with a view to joining the Company within the next three months. Comprehensive training will be given.

Initial salary will be in keeping with experience and qualifications and the positions are permanent and progressive. A Company car is provided and all expenses paid. A non-contributory pension scheme is in operation.

Applications, which will be treated in strict confidence, should have all details of age, education and qualifications and experience and should be sent to:

Personnel Manager, William R. Warner & Co. Ltd., Eastleigh, Hants.

C 5644

**SITUATIONS WANTED
WHOLESALE****BRITISH SENIOR SALES
EXECUTIVE**

of an International Pharmaceutical company just returned after three years' sales promotion, personnel training and administration work in Ceylon, Burma, India, etc. Single, middle aged, very fit, adaptable. Very widely travelled in East, intimate knowledge of territories for many years. Outstanding sales ability, experience and enthusiasm. Box C 3071.

**EXPERIENCED
SALES
DIRECTOR/MANAGER
M.S.M.A.**

in Fine Chemical/Pharmaceutical Industry, requires similar position. Well connected throughout the trade, both Home and Overseas. Age 32. Box C 5616.

GENTLEMAN, 45, experienced compounder of all B.P., B.P.C. and B.N.F. preparations, etc., seeks position of responsibility where knowledge can be fully utilised in congenial and appreciative atmosphere. Residing London area. All propositions welcomed and acknowledged. Box C 3068.

AGENCIES WANTED

INTELLIGENT young man desires to become manufacturer's agent for the following areas: Yorkshire and North East. Box C 3073.

RHODESIA

The Managing Director of a well-established, progressive company of Agent-Wholesalers specialising in pharmaceutical and allied supplies will be visiting Britain in the autumn to meet principals who would be interested in engaging his company's services. In order that plans for the visit can be completed, manufacturers wishing to develop their trade in Central Africa are invited to write now to:

Lee, c/o Advance Buying Corporation, Ltd., 54 New Broad St., London, E.C.2.

C 3064

BUSINESS OPPORTUNITIES

ADVERTISERS are interested in purchasing either outright or controlling interest in a firm of manufacturing chemists with factory in or near London already operating with one or two proprietary or semi-proprietary lines. All particulars treated in strict confidence. Write in the first instance to our Accountants: J. Altman & Co., 36 Seymour Street, London, W.1.

C 5664

A BARGAIN. — £25 complete, BRAND NEW READY-MADE COMPANY REGISTRATIONS, GUARANTEED NO TRADING (England and/or Scotland), all trades available now, including Chemists; Fancy Goods, Photography; Investment; General Merchants and all other trades. Write, phone or call (for English Registrations)—Business Economy Co., Regns., Ltd. (Dept T/9), 156 Strand, London, W.C.2. (Tem. 8377/2294); (for Scottish Registrations) to 19 Walker Street, Edinburgh, 3 (Cal. 1167/9); Read "Advantages of Trading as a Limited Company" (3/- post free); Ltd. Co. may save you tax. We also have seven day Company Registrations with your own choice of name, £21 complete, plus stamp duties. C 506

CAPACITY AVAILABLE for envelope filling of any free-flowing material. Fully automatic plant. Send your enquiries to Box A.C. 13297, Samson Clarks, 57/61 Mortimer St., London, W.1. C 503

WANTED

URGENTLY required for cash, chemists' surplus stocks, bulk or part, particularly toilets, cosmetics, sundries, discontinued manufacturers' lines welcomed. Films, photographic equipment, sunglasses, binoculars, electric razors. Christmas coffrets and fancy goods, etc. Write immediately to Reginald Loftus, 263 Portwood Road, Southampton. Tel.: 54757. C 521

SURPLUS CAMERAS, ENLARGERS, CINE CAMERAS & PROJECTORS, PHOTOGRAPHIC EQUIPMENT OF EVERY DESCRIPTION, SURPLUS AND OUTDATED FILM & PAPER. Phone, write or call:—

SPEARS
(Dept. D.), Watling Street, Shudehill, Manchester.

Phone: Deansgate 7705 (3 lines)

Bankers: Midland Bank, Ltd.

C 438

Wanted—Continued

URGENTLY required. Suppository moulds in good condition, 15, 30, and 60 grains, torpedo shape, 48 x 96 cavity. Offers to Box C 5615.

WANTED. Clear out your old or surplus stock of photographic material. All papers, cards, films, plates, sundries, cameras — anything photographic. Send them along. Fair price given. Cash per return. Postage refunded. Established 1898. J. Hackett, Photo Stores, 23 July Road, Liverpool, 6. C 3054

WE WILL PURCHASE for cash a complete stock, a redundant line, including finished or partly finished goods, packing raw materials, etc. No quantity too large. Our representative will call anywhere. Write or telephone:—Lawrence Edwards & Co., Ltd., 6/7 Wellington Close, Ledbury Road, London, W.11. Tel.: Bayswater 4020 and 7692. C 140

MISCELLANEOUS SALES

CASH REGISTERS FOR SALE. New and second-hand, electrically- or hand-operated. Different models. Part exchange and easy terms. Write Box C 547.

PATENTS

It is desired to secure the full commercial development in the United Kingdom of **BRITISH PATENT No. 773292** which relates to "2-Aryl-3-Amino-Butan-2-Ols and process for preparing same" either by way of the grant of licences or otherwise on terms acceptable to the Patentee. Interested parties desiring copies of the patent specifications should apply to **STEVENS, LANGNER, PARRY & ROLLINSON**, 5 to 9 Quality Court, Chancery Lane, London, W.C.2. C 5636

TENDERS**NATIONAL HEALTH SERVICE
SCOTLAND****SUPPLY OF MEDICINES, DRUGS,
SURGICAL DRESSINGS, ETC.**

THE DEPARTMENT OF HEALTH FOR SCOTLAND invite tenders for the supply of Medical Stores in the categories detailed below to **HOSPITALS IN SCOTLAND** under the National Health Service and Prison Service for a period of one year from 1st January, 1961.

*Due Date for
Return of
Tenders*
10 a.m. on

Categories of Stores

Antiseptic Fluids; Injections (Ampoules & Vials)	26th Aug., 1960
Medicinal Tablets and Pills (including Hormone and Sulphonamide Preparations)	26th Aug., 1960
Medicines and Drugs; Vitamin Preparations	26th Aug., 1960
Anaesthetics; Dextrose; Glycerin; Malt Extract	29th Aug., 1960
Liquid and Soft Paraffin; Methylated Spirit	29th Aug., 1960
Maternity Pads; Surgical Dressings; Soft Soap	29th Aug., 1960

Applications for tender-forms should be made in writing to the Secretary, Department of Health for Scotland, Room R/144, Government Buildings, Broomhouse Drive, Saughton, Edinburgh, 11, and should bear the word "Contracts" in lower left-hand corner. The category (or categories) of stores for which forms are required should be clearly stated. No undertaking can be given that the lowest (or any) tenders will be accepted. The Ministry of Health, as agents for the Department of Health for Scotland, will enter into contracts with the successful tenderers. C 5650

TRADE MARKS

THE TRADE MARK No. 309882 consisting of the word **CREMOLIN** (label) and registered in respect of a food for infants and invalids was assigned on the 13th November, 1959, by Aspro-Nicholas Limited, of 16 Berkeley Street, London, S.W.1, to Ashe Laboratories Limited, of Ashtree Works, Kingston Road, Leatherhead, Surrey. **WITHOUT THE GOODWILL OF THE BUSINESS IN WHICH IT WAS THEN IN USE.** C 5640

STOCKTAKING

QUIET AND ACCURATE workmanship. Over 30 years' practical experience. Detailed inventories supplied to suit your individual requirements. Your own stock sheets priced. Terms moderate. C. W. Playfoot, 8 Aylward Road, London, S.W.20. Phone: Liberty 4104. C 520

DEVELOPING AND PRINTING

QUALITY FIRST but QUALITY FAST

D and P

Guaranteed per return postal service
GWENT PHOTOGRAPHIC SERVICE
Snatchwood Works, Pontypool, MON
Telephone: Talywain 355 C 574

You cannot do better than specify **COCKER**

P.C.M.X. and D.C.M.X.

For many years we have been large-scale manufacturers of these widely-used intermediates for which we should be pleased to receive your enquiries and to submit samples at your request.

In addition we should like to draw your attention to the undermentioned selection from our production of fine chemicals.

D.D.T. (and certain formulations)

Terpineol B.P. and Perfumery

Chlorxylenol fractions

Chlorinated Cyanuric Acids

Dichlorophenol

P.C.O.C.

Chloral Hydrate B.P.

Terpinolene

M.B.T.

M.B.T.S.

Benzylated-Cresylic-Acid

Chloral Anhydrous

Ortho Benzyl parachlorophenol

The finest of the fine from :

COCKER CHEMICAL CO. LTD. (Dept. CD.)

OSWALDTWISTLE • LANCASHIRE

Telephone : Accrington 3621-3

in the treatment of
peptic ulcer

ROTER

has particular
advantages



ROTER achieves a high cure rate and often gives effective control of even refractory chronic cases which have resisted other treatments.

ROTER in many cases obviates the need for hospitalization or surgical intervention.

ROTER helps patients to keep ambulant and symptom-free with a minimum of medication and with few, if any, dietary restrictions.

ROTER in general practice enables the physician to take adequate care of his gastric cases without frequent or prolonged supervision.

ROTER has no known side effects.

ROTER requires no supplementary medication such as sedatives or anti-spasmodics.

ROTER shows a saving in cost when compared with conventional methods of treatment.

REFERENCES

Therapie der Gegenwart, 1953, 3, 108
Gazzetta Medica Italiana, 1954, 113, 343
Die Medizinische, 1955, 4, 163
British Medical Journal, 1955, 2, 827
Compt Rendus de la Société de Biologie, 1956, 150, 1019
American Journal of Gastroenterology, 1957, 28, 439
Wiener Medizinische Wochenschrift, 1958, 108, 218
Ärztliche Praxis, 1958, 10, 766
Journal Lancet, 1960, 80, 37

FORMULA

Each Roter tablet contains:

Magnesium Carbonate (400 mg.). Bismuth Subnitrate Roter (350 mg.). Sodium Bicarbonate (200 mg.) and Cortex Rhamni Frangulae (25 mg.).

PACKINGS OF ROTER TABLETS

Retail Prices including P.T., Trial size 40 tablets 6/10d., Standard size 120 tablets 19/4d.
Dispensing packs 360 and 720 tablets, P.T. exempt.

OBTAINABLE FROM YOUR USUAL WHOLESALER

ROTER TABLETS are in Category "S". Literature on Request.

F.A.I.R. LABORATORIES LTD · TWICKENHAM · MIDDLESEX

The  **CHEMIST AND DRUGGIST**

JULY 16 1960



HOLIDAY TIME IS **Savlon** TIME

THIS SOOTHING, QUICK-HEALING ANTISEPTIC CREAM
IS NEEDED IN EVERY BEACH BAG AND RUCKSACK

INSECT BITES · BARBED WIRE AND BRAMBLE
SCRATCHES · BURNS FROM PORTABLE STOVES ·
GRAZES · CUTS FROM BROKEN GLASS ·
SORENESS CAUSED BY OVEREXPOSURE TO
THE SUN

Savlon antiseptic cream is mild and soothing. It is also a powerful germ-killer which destroys all the germs likely to delay the healing of cuts, abrasions or minor burns. The cream soothes smarting and soreness at once. Specially good for children.

Retail prices: 2/6d. and 4/6d. per tube.

"Nationally advertised and reserved for pharmacists."

Savlon ANTISEPTIC CREAM *helps nature heal*

Ph 53

